SERVICE MANUAL

Model Name : EP758/EP759

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Date	Revise Version	Description
2004/10/12	V1.0	Initial Issue
2004/10/22	V1.1	Revise 7-2, 7-4, 7-6, 7-16, 7-17 and 7-32

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Document #896-G04-01A . P/N: 36.89601.001

Preface

This manual is prepared for the maintenance service for EP758/EP759 Micro-portable XGA DLP Projector. Maintenance procedures described in this manual are intended to isolate faulty parts and replace them in the field. It also aims to serve as a guide in procuring replacement parts for this product.

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This manual includes system overview, major system assembly, components' description, and the "Troubleshooting" making explanations on how to detect errors. It also includes a flow chart for checking or correcting faults.

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Notice:

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EP758/EP759 Service Manual
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Manual Version 1.0
Document #896-G04-01A

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Chapter 1

Introduction

This manual is applied to 0.7”*1 DMD Color Projector with digital imaging functionality based on Digital Micromirror Device (DMD) technology. It’s the mode of single panel, **250watt(EP758) / 300 watt(EP759)** long life lamp.

The manual gives you a brief description of basic technical information to help in service and main taining the product.

Your customers will appreciate the quick response time when you immediately identify problems that occur with our products. We expect your customers will appreciate the service that you offer them.

This manual is for technicians and people who have an electronic background. Send the product back to the distributor for repairing and do not attempt to do anything that is complex or is not mentioned in the troubleshooting.

1-1 Product Highlights

- One 0.7" DDR DMD projection system with **2000(EP758) / 2210(EP759)** ANSI lumen
- Contrast (FOFO) : 1000 : 1
- **250(EP758) / 300(EP759)** - Watt Lamp 1500hrs (user replaceable)
- High efficiency cooling system with system acoustic noise level **33dBA(EP758) / 36dBA (EP759)** (Average)
- Dimensions : 250*335*100mm w/wind tunnel
- NTSC/PAL/SECAM video capability with S-video / composite / component, and HDTV (480i/p, 576i/p, 720p, 1080i)
- Auto detection of computer signal input.
- Auto Image.(Auto-tracking /frequency /position adjustment)
- Automatically saves adjustments for future use
- On-screen menu with **11 languages(EP758) / 9 languages(EP759)**
- One DVI input (Including Analog and Digital RGB signal) with HDCP function
- Wireless remote controller

1-2 Optical Specification

Technology	Single 0.7” XGA DDR DMD chip
Resolution	1024 x 768
Brightness	Specification: **2500(EP758) / 3000(EP759)** lumens Typical output: **2000(EP758) / 2600(EP759)** lumens
Contrast ratio	Specification: 1500:1 full on/full off Typical output: 1300:1 Minimum: 1000:1 full on/full off
Uniformity	Specification: 85% (JBMA)
Displayable colors	16.7 million colors 256 shades of gray
Color temperature	7500^{o}K adjustable form 6500^{o}K - 9500^{o}K
Lamp type	300 watt lamp and power-saving mode to 250 watts **for EP759** 250 watt lamp and power-saving mode to 200 watts **for EP758**
Lamp life	2000 hours full on mode 1500 hours to 50% survival typical full on mode 3000 hours in ECO-mode 2500 hours to 50% survival typical in econo-mode
Projection lens	F/2.2-2.6; f24.5 –29.4: 1.2x **(EP759)** F/2.4-2.6; f28-33.6:1.2x **(EP758)**
Projection screen size	Adjustable from 24.4” to 292.5” **(EP759)** Adjustable from 24.6” to 246” **(EP758)**
Projection distance	1.2-10m

1-3 Electrical specification

Input connections

- Terminal:-

  DVI x 1 (Analog RBG, Component, HDTV, Digital RGB, HDCP)
  15 pins D-sub VGA signal input
  Composite Video X 1.
  Three RCA connectors for Component video/HDTV input
  Audio Input X 1
  USB X 1 (for remote mouse)
  S-Video X 1
  IR x 2 (Front, Top panel)
  RS232 Serial Control x 1 (3 pin mini din)
  Power Cord x 1

- PC/Video: One DVI-I + USB(analog and digital YCbCr/YPbPr w/ HDCP).

- One D-Sub 15-pin connector for analog RGB/component video/HDTV

- Video: 3-RCA type connector for YPbPr component video.
  One mini DIN for S-video connector.
  One composite RCA type connector.
- Control: 1 RS-232 (use standard Mini Dim 3 pins configuration) (with talk back ability and 9600 baud rate, talk back ability must include lamp hours) (on/off and all inputs should have discreet IR and RS-232 commands)
  One Audio input for every input- (Phone Jack, Stereo)

Outputs One 15pin D-Sub Output
One audio out

Audio Two watt built in two speakers respectively

Lock One Kensington key lock hole

Tilt angle 7 degrees with elevator mechanism

IR receivers	Front and Top of projector
Power Switch	No toggle power switch required or wanted
Power supply	Universal AC 100-240V 50/60 Hz with PFC input Used OSRAM P-VIP 300/1.3 E21.8 300W Lamp **(EP759)** Used Phillip E21.8 250W Lamp **(EP758)**
Power consumption	Standby mode - < 10 Watt @ 110V AC
Operational noise	36 dB(A) **300W(EP759)** Normal mode 33 dB(A) **250 W(EP758)** Normal mode
Input signal spec.	Hsync Frequency 15 ~ 100 kHz Vsync Frequency 43 ~ 120 Hz Video Signal RGB (PC) -Analog RGB 0.7Vp-p, 75 ohm, Separate TTL H,V Sync. -Analog RGB 1Vp-p, 75 ohm, Sync. On Green signal -Analog RGB 0.7Vp-p, 75 ohm, Composite TTL Sync. Video -Composite video 1Vp-p,75 ohm -S-video Luminance 0.714Vp-p,75 ohm -Chrominance 0.286Vp-p,75 ohm

Computer Compatibility (Analog/Digital)

System Controller	PIXELWORKS PW463
Video Compatibility	Standards -NTSC - M (3.58 MHz), 4.43 MHz -PAL - B, D, G, H, I, M, N -SECAM - B, D, G, K, K1, L -HDTV - 480i/576i ; 480p/576p ; 720p ; 1080i
Horizontal scan rate	15 – 100 kHz
Vertical scan rate	43 – 120 Hz

1-4 Mechanical Specification

Weight

Approximate 8lbs

Unit dimension (W X D X H)

inner dimension 335*250*100 (mm)

Cooling System

Advanced air flow

Three(EP758) / Four(EP759) fans with low system acoustic noise level

Temperature control circuits with adaptive voltage

control fan speed

Tilt Angle

7 degrees with elevator mechanism

Keystone correction

± 16° Vertical and Horizontal

Lamp Door Protection

Lamp power supply shut off automatically when door open

1-5 Environment

Temperature	Operating:	5 — 35°C
	Storage:	-20 — 60°C
Maximum Humidity	Operating:	5 — 35°C, 80% non-condensing
	Storage:	-20 — 60°C, 80% non-condensing
Acoustic noise level	**EP758**	**/EP759**
	33dB(A)	/ 36dB(A) (Typical, 23 ± 2°C) with wind tunnel design
	33dB(A) 250W	/ 36 dB(A) 300W lamp mode.
	30dB(A) 200W	/ 33 dB(A) 240 W dimmable mode.

Follow ISO-7779 regulation sound pressure level A weighting measurement

Lamp life	1500 hours typical, 50% survival rate		
Altitude	Operating	0~2,500 ft	5°C~35°C
		2,500~5,000 ft	5°C~30°C
		5,000~10,000 ft	5°C~25°C
	Storage	40,000 ft (Max)	
MTBF	12000 HRs		

1-6 Compatible Modes

Analog

Compatibility	Resolution	V-Sync [Hz]	H-Sync [KHz]
VGA	640x350	70	31.5
	640x350	85	37.9
	640x400	85	37.9
	640x480	60	31.5
	640x480	72	37.9
	640x480	75	37.5
	640x480	85	43.3
	720x400	70	31.5
	720x400	85	37.9
SVGA	800x600	56	35.2
	800x600	60	37.9
	800x600	72	48.1
	800x600	75	46.9
	800x600	85	53.7
XGA	1024x768	43.4	35.5
	1024x768	60	48.4
	1024x768	70	56.5
	1024x768	75	60.0
	1024x768	85	68.7
SXGA	1152x864	70	63.8
	1152x864	75	67.5
	1152x864	85	77.1
	1280x1024	60	63.98
	1280x1024	75	79.98
	1280x1024	85	91.1
SXGA+	1400x1050	60	63.98
UXGA	1600x1200	60	75
MAC LC 13”	640x480	66.66	34.98
MAC II 13”	640x480	66.68	35
MAC 16”	832x624	74.55	49.725
MAC 19”	1024x768	75	60.24
MAC	1152x870	75.06	68.68
MAC G4	640x480	60	31.35
MAC G4	640x480	120	68.03
MAC G4	1024x768	120	97.09
i Mac DV	640x480	117	60
i Mac DV	800x600	95	60

i Mac DV	1024x768	75	60
i Mac DV	1152x870	75	68.49
i Mac DV	1280x960	75	75
i Mac DV	1280x1024	85	91.1

Digital

Compatibility	Resolution	V-Sync [Hz]	H-Sync [KHz]
VGA	640x350	70	31.5
	640x350	85	37.9
	640x400	85	37.9
	640x480	60	31.5
	640x480	72	37.9
	640x480	75	37.5
	640x480	85	43.3
	720x400	70	31.5
	720x400	85	37.9
SVGA	800x600	56	35.2
	800x600	60	37.9
	800x600	72	48.1
	800x600	75	46.9
	800x600	85	53.7
XGA	1024x768	60	48.4
	1024x768	70	56.5
	1024x768	75	60.0
	1024x768	85	68.7
SXGA	1152x864	70	63.8
	1152x864	75	67.5
	1152x864	85	77.1
	1280x1024	60	63.98
	1280x1024	75	79.98
	1280x1024	85	91.1
SXGA+	1400x1050	60	63.98
UXGA	1600x1200	60	75

Chapter 2

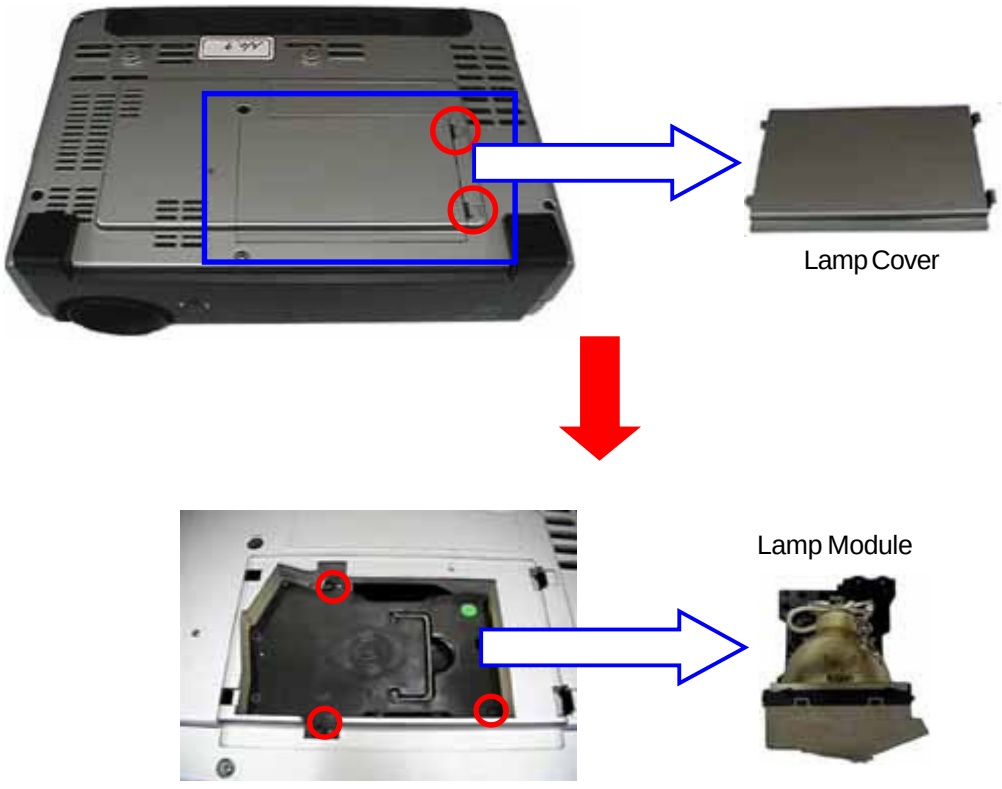
Disassembly Procedure

The Front Side

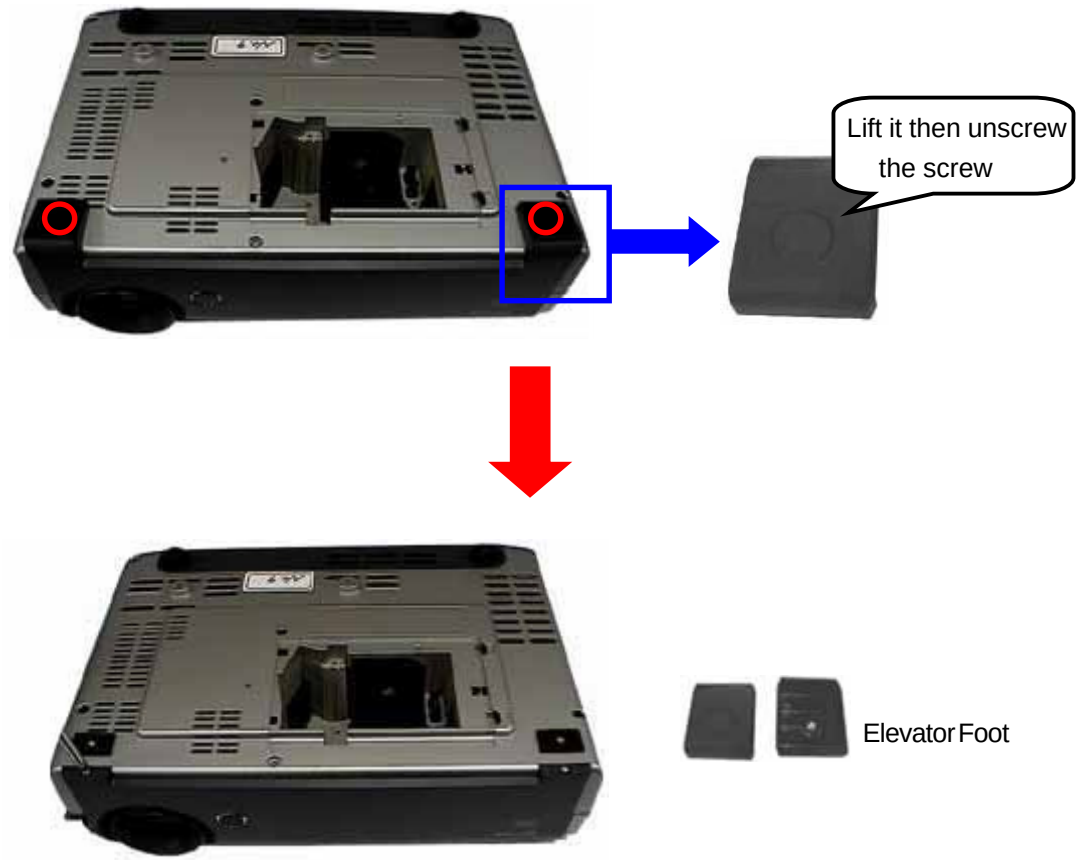
The Rear Side

2-1 Disassemble Lamp Module and Elevator Foot

Step1: Turn unit to bottom side. Remove Lamp Cover and unscrew three screws to pull out Lamp Module.



Step2: Unscrew two screws to detach the Elevator Foot from Bottom Housing.



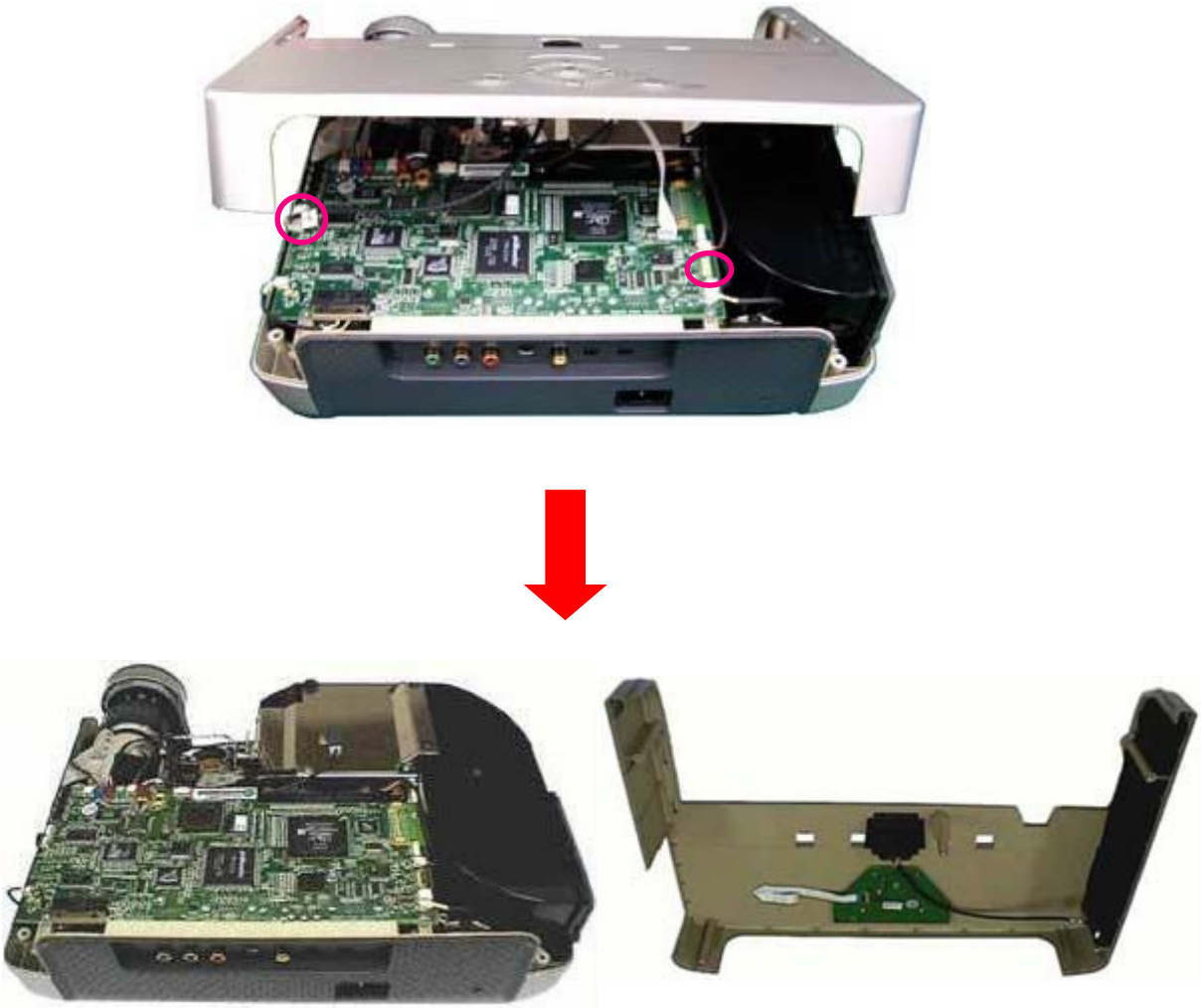
2-2 Disassemble Top Cover, Front Cover, Keypad Board and IR Sensor Module

Step1: Unscrew eight screws and then turn unit to the top side.

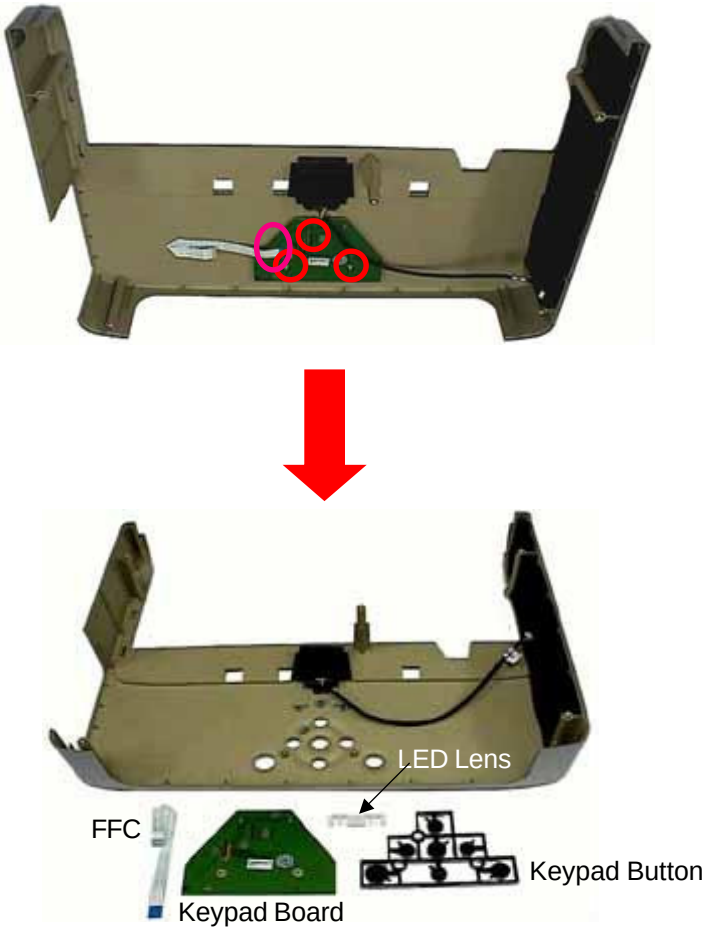
Step2: Loose Front Cover from Top Cover and then disconnect the connector to remove Front Cover.

Step3: Tear off the tape from Front Cover to remove the IR Sensor Module.

Step4: Disconnect two connectors to remove Top Cover.



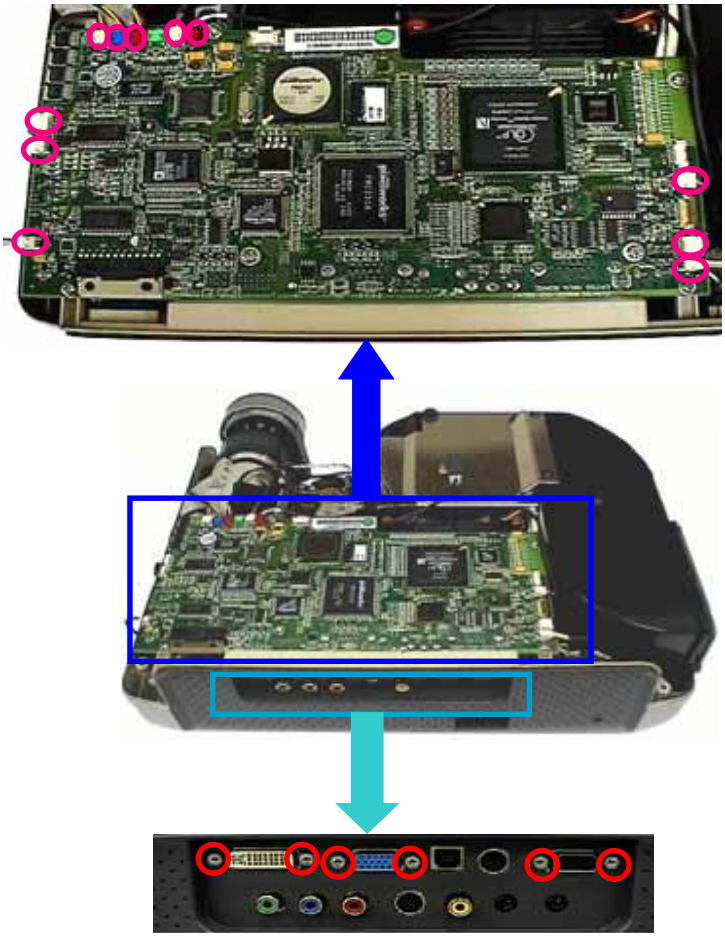
Step5: Unscrew three screws and disconnect the wire to remove the Keypad Board, Keypad Button and FFC.



2-3 Disassemble Main Board Module, Thermal Switch and LVPS Module

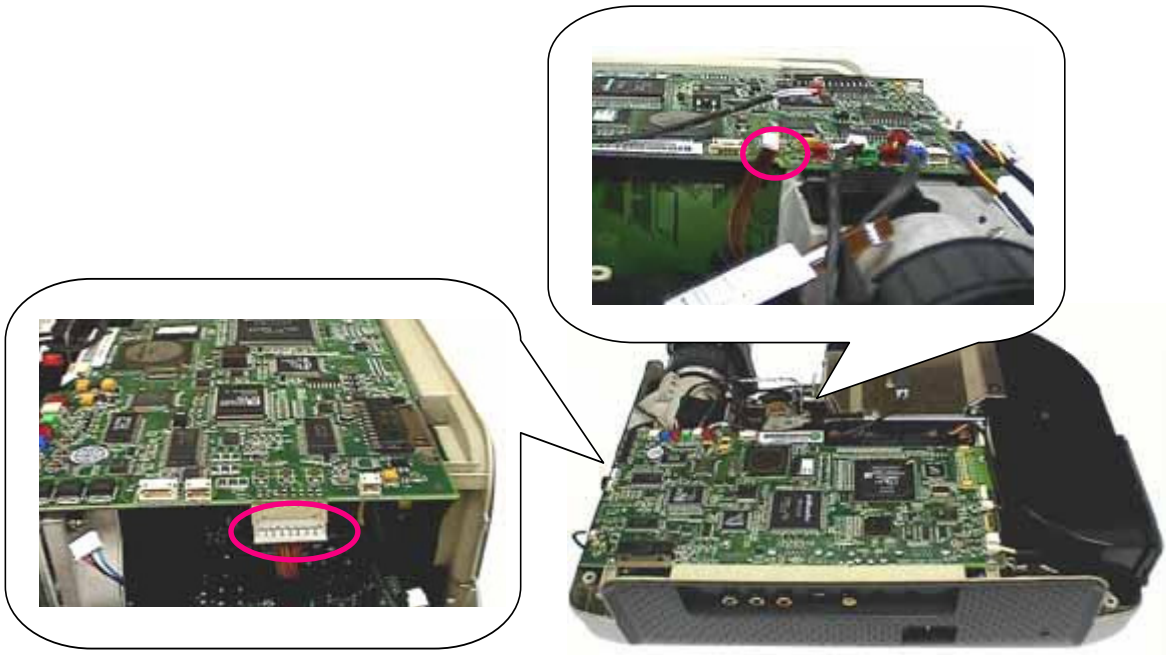
Step1: Disconnector eleven connctors from Main Board Module.

Step2: Unscrew six hex screws from Bottom Cover.

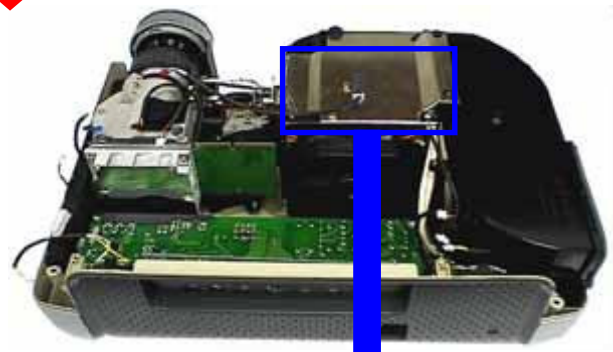


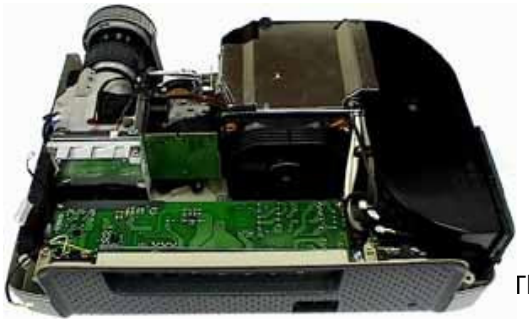
Step3: Disconnector two connectors to remove Main Board Module.

Step4: Unscrew one screw to remove Thermal Switch.

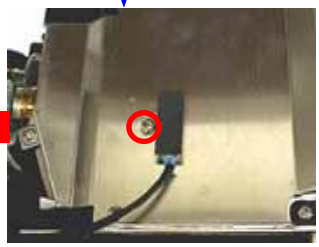


Main Board Module



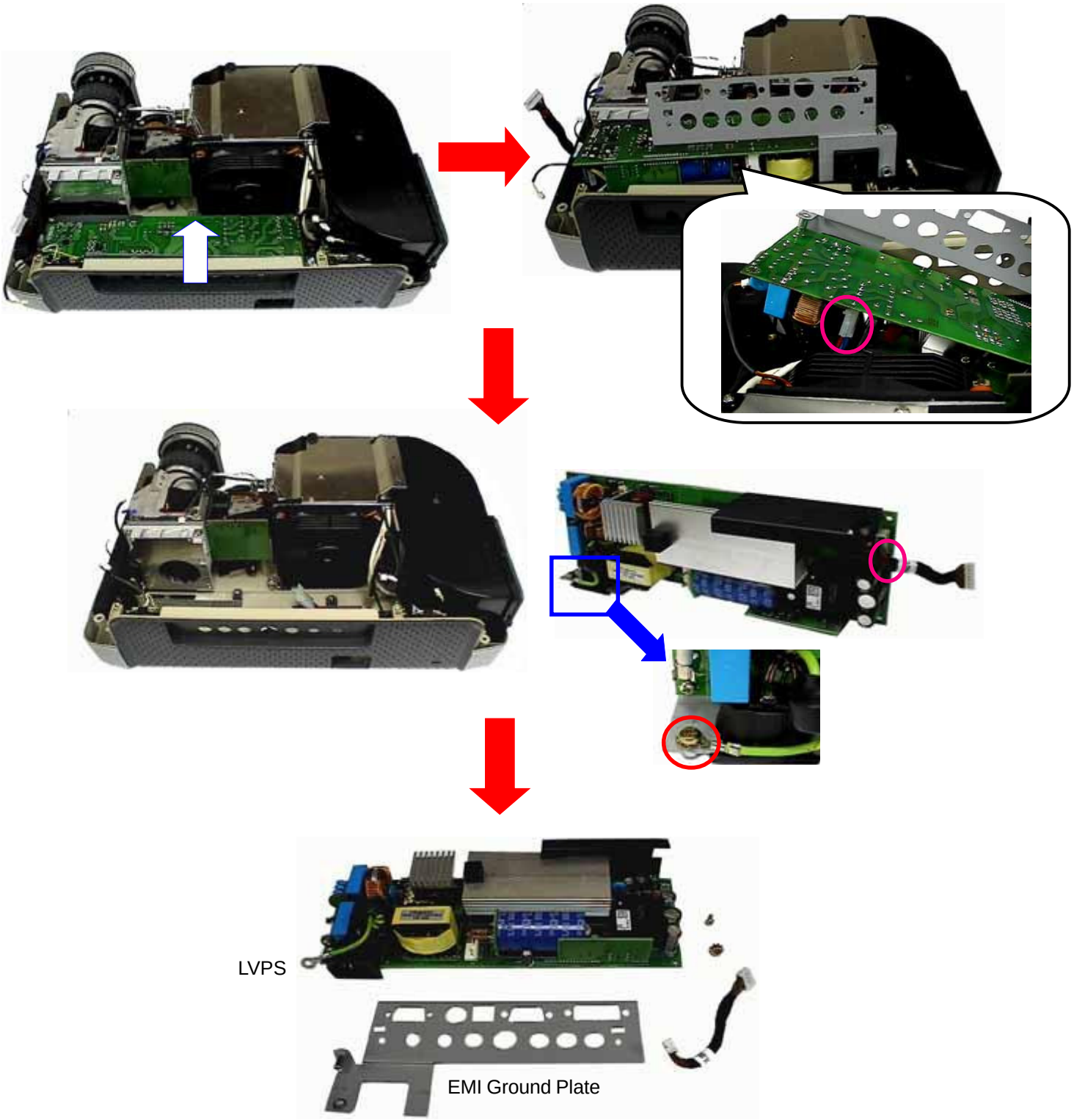


Thermal Switch



Step5: Pull up the LVPS Module and the disconnect the connector.

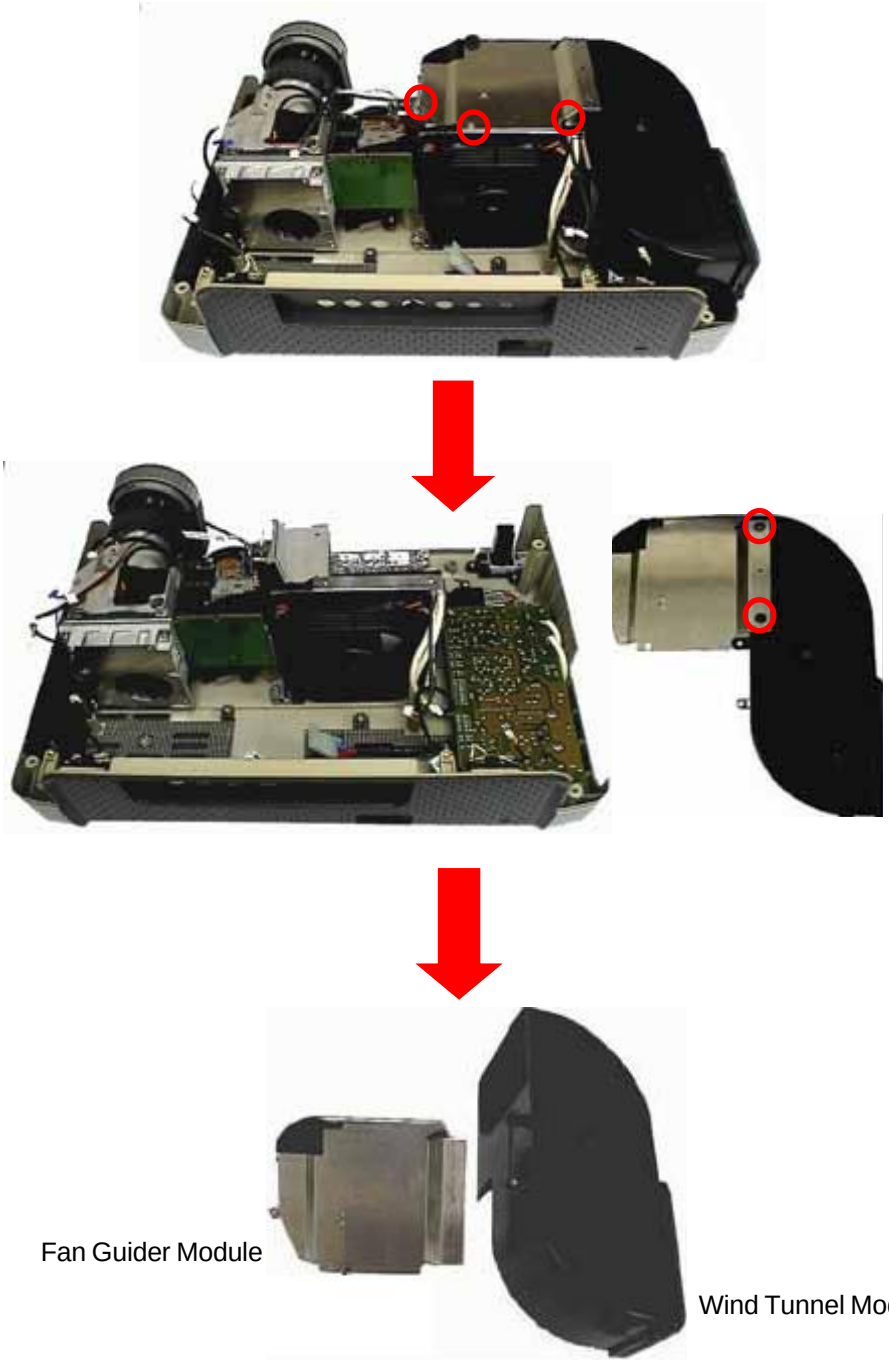
Step6: Unscrew the screw to remove EMI Ground Plate and separate the wire.



2-4 Disassemble Fan Guider Module, Wind Tunnel Module, Lamp Driver Module and Axial Fan 90x25 Module

Step1: Unscrew three screws to separate Fan Guider Module and Wind Tunnel Module from Bottom Housing.

Step2: Unscrew two screws from Wind Tunnel Module to remove Fan Guider Module.

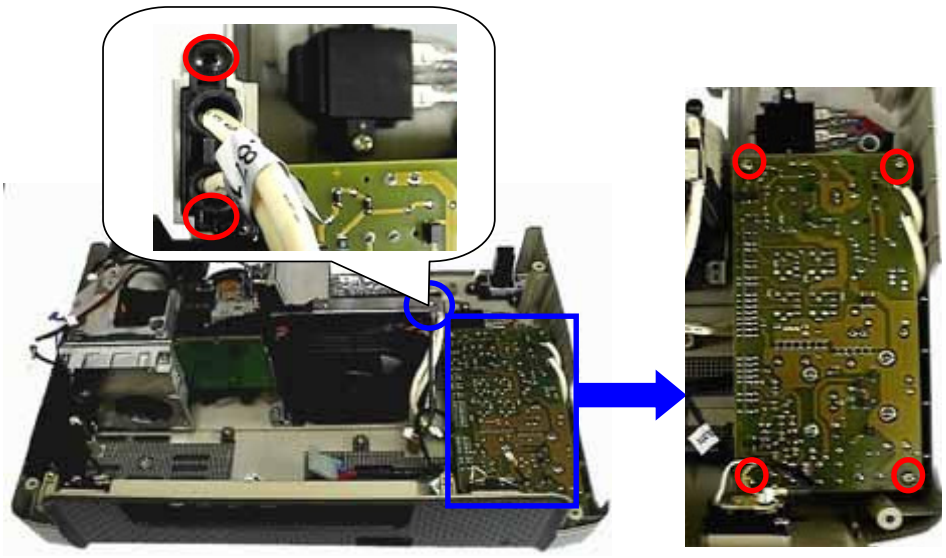


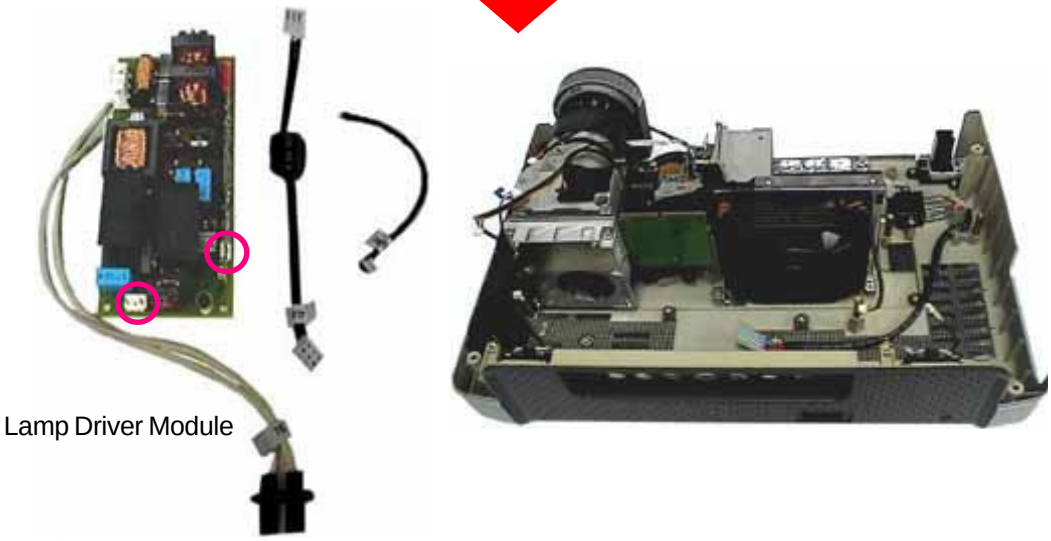
Fan Guider Module

Wind Tunnel Module

Step3: Unscrew six screws to remove Lamp Driver Module.

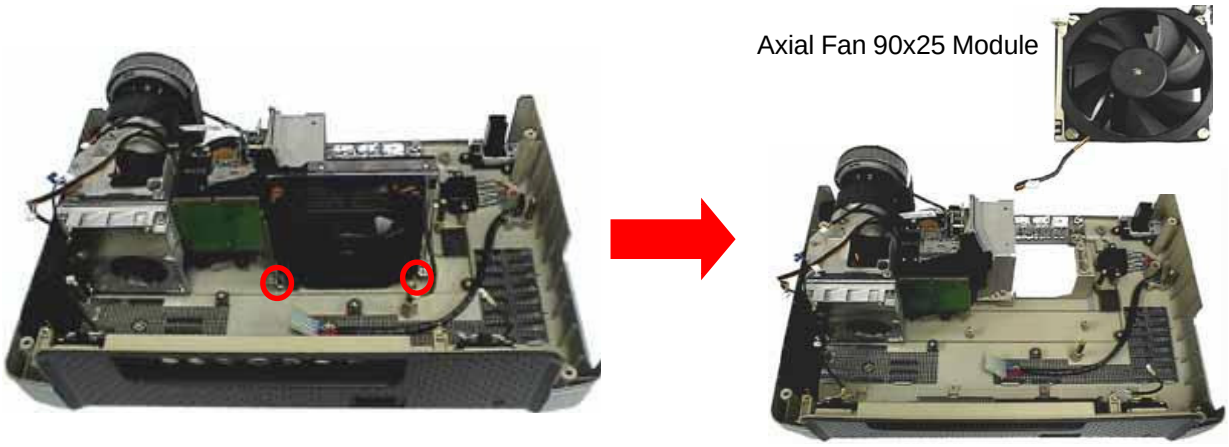
Step4: Separate two connectors from Lamp Driver Module.



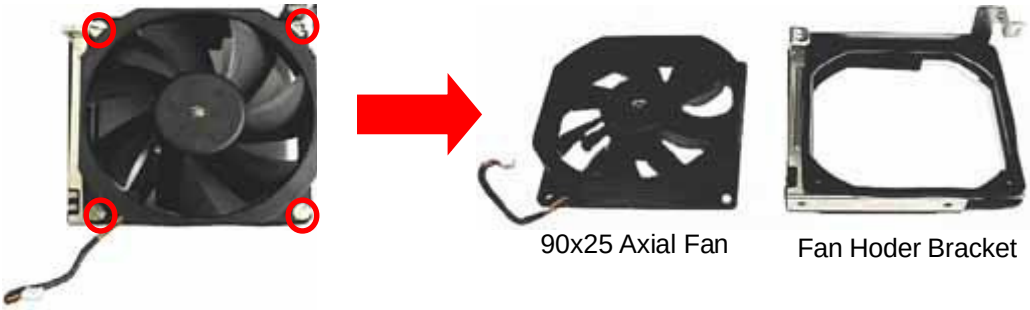


Lamp Driver Module

Step5: Unscrew two screws to remove Axial Fan 90x25 Module.

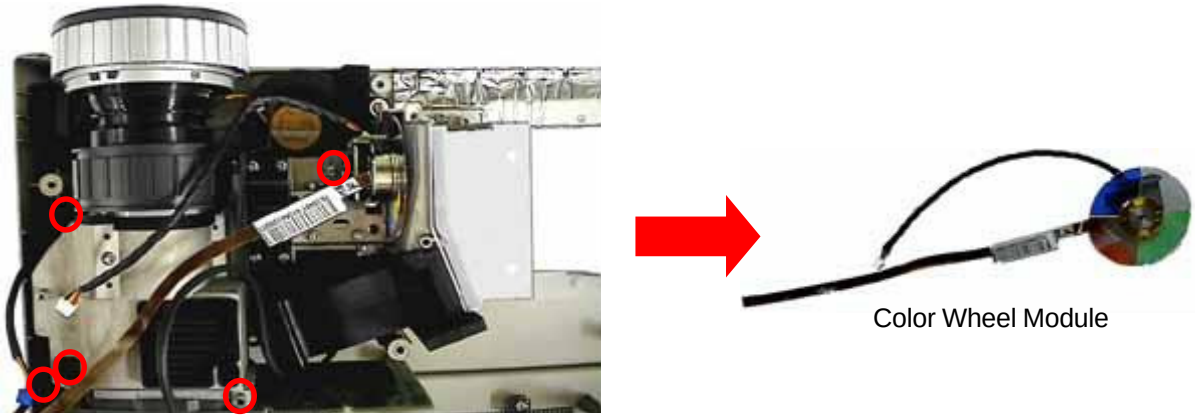


Step6: Unscrew four screws to separate Fan Hoder Bracket and 90x25 Axial Fan.



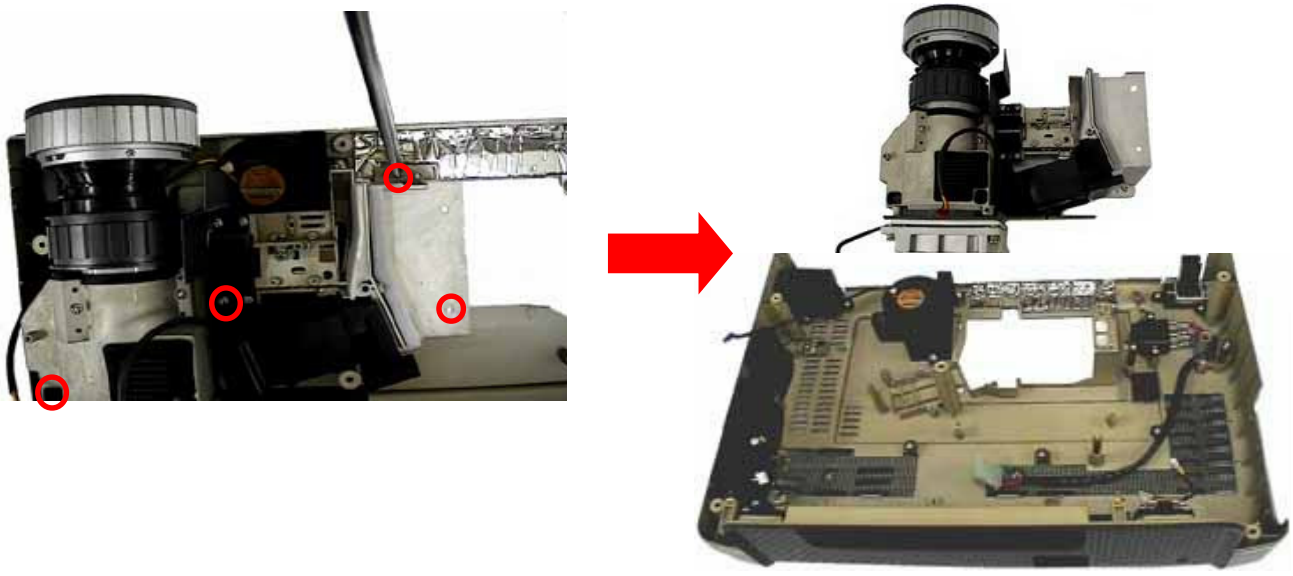
2-5 Disassemble Color Wheel Module, Optical Engine Module, 45x45x9 Dish Fan and Blower Fan 60x25

Step1: Unscrew five screws to remove Color Wheel Module.



Step2: Unscrew one screw to separate Color Wheel and Photo Sensor Module.

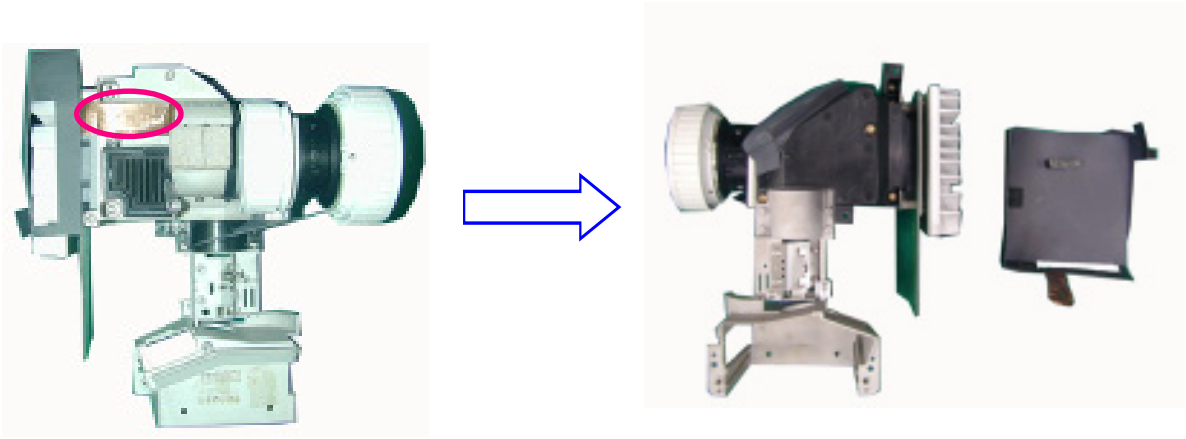
Step3: Unscrew four screws to remove Engine Module from Bottom Housing.



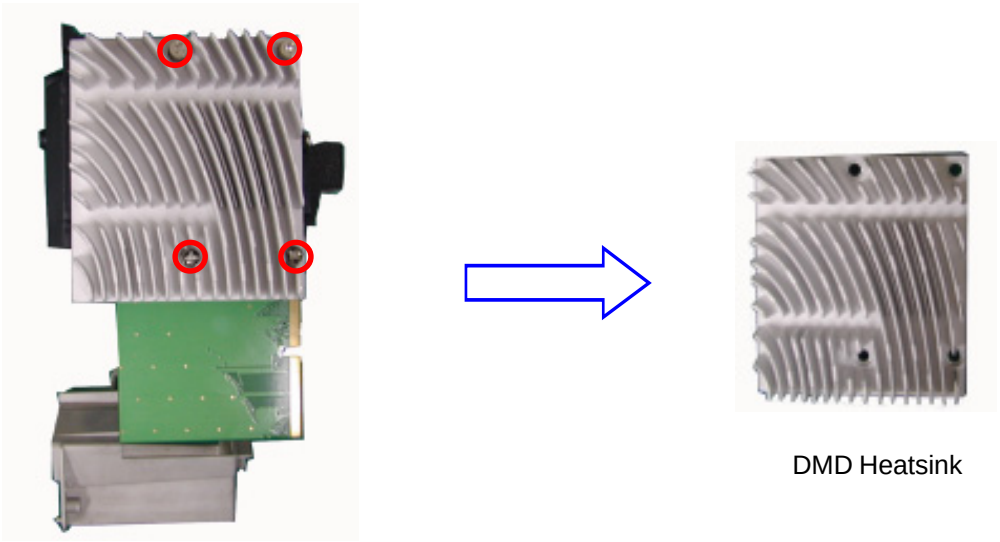
For EP758

Step4: Tear off EMI tape to separate Wind Guider Cover Mylar from Engine Module.

Note* If the unit is EP759, please skip step 4 and step 5



Step5: Unscrew four screws to remove DMD Heatsink.



DMD Heatsink

For EP759

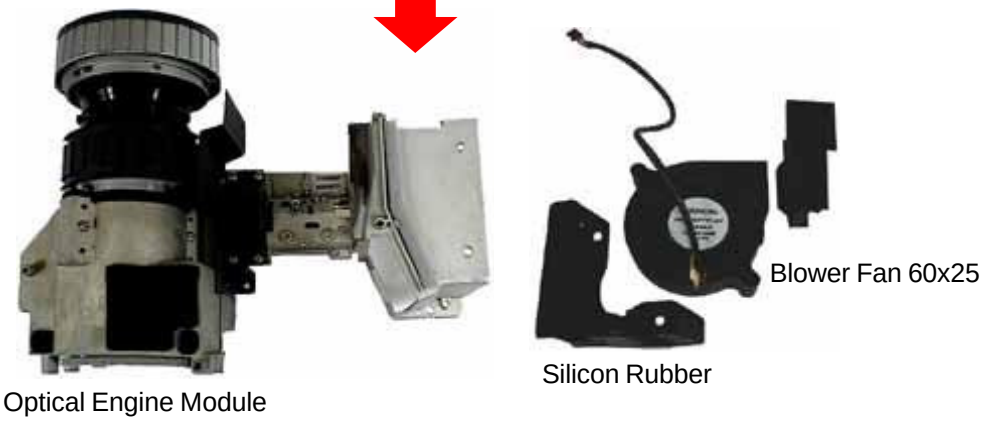
Step6: Unscrew four screws to remove DMD Heatsink Module.

Step7: Unscrew four screws to remove DMD Heatsink Cover.

Step8: Unscrew three screws to separate 45x45x9 Dish Fan from DMD Heatsink AL.

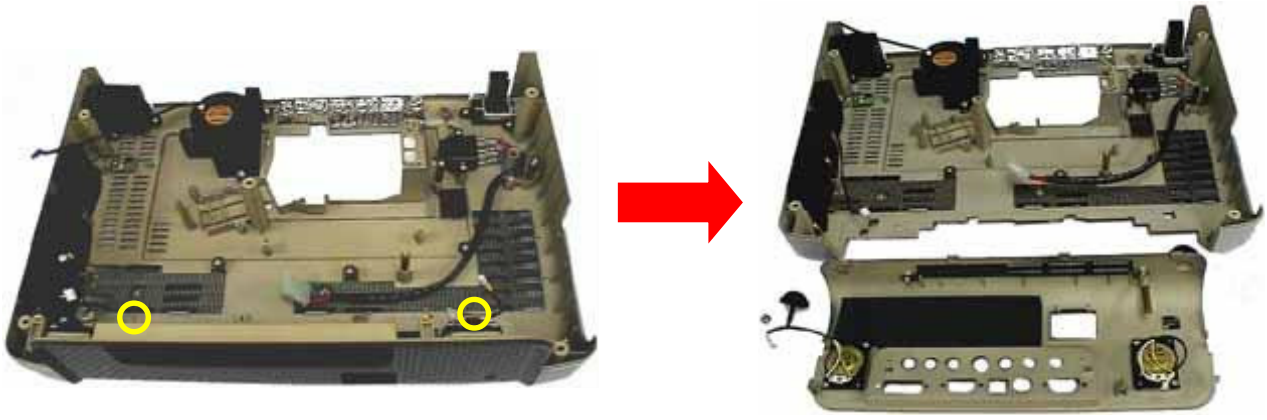
Step9: Unscrew four screws to remove Bracket Plate, Insulation Mylar, DMD Board and DMD Chip.

Step10: Separate Blower Fan 60x25 Module and Optical Engine Module and then pull up Blower Fan 60x25 from the Silicon Rubber.

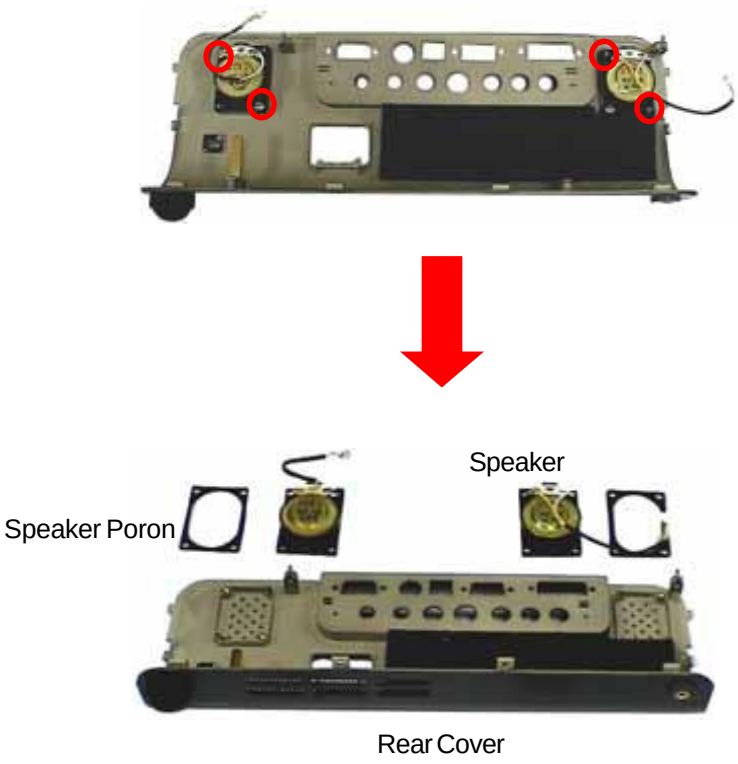


2-6 Disassemble Speaker, Blower Fan 50x20, Thermal Sensor Board, Interrupt Switch Module, Bottom Cover and Rear Cover

Step1: Loose Rear Cover from Bottom Cover.

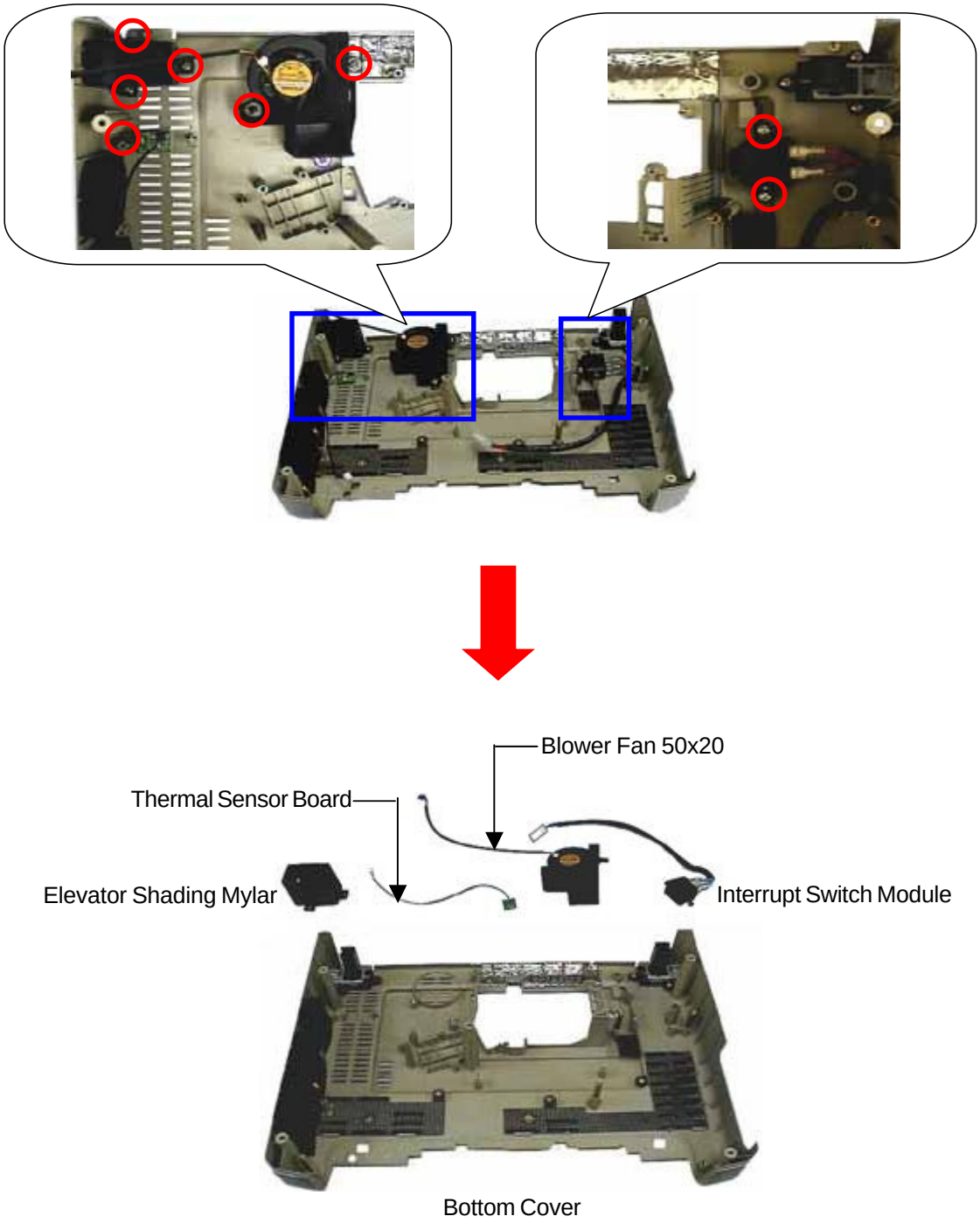


Step2: Unscrew four screws to remove Speaker.



Step3: Unscrew six screws to remove Blower Fan 50x20, Elevator Shading Mylar and Thermal Sensor Board.

Step4: Unscrew two screws to remove Interrupt Switch Module.



Chapter 3

Troubleshooting

3-1 Equipment Needed

- EP758/EP759 Projector
- VESA VGA Cable/VESA DVI Cable
- PC (Personal Computer) with analog and digital signal output.
- DVD Player for Video Signal and Audio Signal.
- EP758/EP759 Remote Controller

3-2 Main Procedure

3-2.1 Power Troubleshooting

A. Is LED Indicator OK?

- Check the Power cord and AC power outlet.
- Check the Keypad cable has broken or not.
- Check if all the wires are connected well inside.
- Check the Ballast.
- Check the Main board.
- Check the Keypad board.

B. Is Fan Working After Press Power/Standby Button?

- Check the Keypad cable has broken or not.
- Check if all the wires are connected well inside.
- Check the Thermal board.
- Check the Main board.
- Check the Fan.

C. Is Lamp Lit?

- Check the Lamp cover assembly OK or not.
- Check thay have the sound of Lamp ignitor output from Unit or not.
- Check if the cable of Interrupt Switch is connected well.
- Check the DMD board.
- Check the Lamp module.
- Check the Ballast.

3-2.2 Performance Troubleshooting (Computer Signal)

A. Have Image?
- Ensure the Signal cable and Source work as well.
- Check that can OSD Menu show on the screen.
- Check the Main board.
- Check the DMD board.

B. Have Garbage Pattern?
- Ensure the Signal cable and Source work as well.
- Check the Main board.
- Check the DMD board.

C. Uniformity OK?
- Ensure the Projection screen without dirty.
- Ensure the Projection lens is clean.
- Ensure the Brightness is within spec.
  (Replace the Lamp if the Brightnedd is less than spec.)
- Check the Optical engine.

D. Is Color OK?
- Ensure the Signal cable works as well.
- Check the “Color wheel index” in the service mode of OSD Menu. (*Note)
- Check the Photo sensor.
- Check the Main board.
- Check the DMD board.

E. Dot Defect isn’t Compliant with the Spec.
- Ensure the Projection lens is clean.
- Use the Air gun for the Optical engine clean.
- Check the DMD chip.

G. Have Noise?
- Ensure the Signal cable and Source is work as well.
- Adjust the Tracking selection in OSD Menu.
- Press the Menu button to check that have the noise issue appear on OSD Menu.
  (Check the DMD board if the noise also appear on the OSD Menu.)

F. Have Line Bar?

- Adjust the frequency selection in OSD Menu.
- Press the Menu button to check that have Line bar show on the OSD Menu. (Check the DMD chip and DMD board. If the Line bar also show on the OSD Menu)
- Ensure that there is no dust on the DMD Contact housing module.
- Re-assembly for DMD module.
- Check the Main board.

G. Have Noise?

- Ensure the Signal cable and Source is work as well.
- Adjust the Tracking selection in OSD Menu.
- Press the Menu button to check that have the noise issue appear on OSD Menu. (Check the DMD board if the noise also appear on the OSD Menu.)

*Note : The procedure to enter service mode is..
Press "Power", "Up", "Down", "Right" button when the Unit under search status.

3-2.3 Performance Troubleshooting (Video Signal)

A. Have Image?

- Ensure the signal cable and source work as well.
- Check that can OSD menu show on the screen.
(Check the main board if OSD menu cannot show on the screen)

B. Have Garbage Pattern?

- Ensure the signal cable and source work as well.
- Check that can OSD menu show on the screen.
(Check the main board if OSD cannot show on the screen)

C. Is Color OK?

- Do the “Factory Reset” of the engineering mode.
- Ensure the signal cable work as well.
- Check the color temperature setting of OSD menu.
  (Check the main board if the setting of color temperature is under default)
- Check the color setting of OSD menu. Ex: “Saturation”, ”Tint” and “Sharpness” setting of OSD menu.

D. Is Image Flicker?

- Ensure the signal cable work as well.
  (Please check the length of cable; the signal will be reduce when the signal cable is longer than 5m)
- Do the “Factory Reset” of the engineering mode.
  (Check the Main board if the image still flicker after the factory reset.)

E. Is There Line Bar Show On The Screen?

- Check that can OSD menu display on the line bar area.
  (Check the DMD board if the OSD menu cannot display on the line bar area.)
  (Check the Main Board if the OSD menu can display on the line bar area)

F. Is Image Noise?

- Ensure the signal cable is work as well.
  (Check the cable length of cable; the signal will be reduce when the signal cable is longer than 5m)
- Do the “Factory Reset” of the engineering mode.
  (Check the Main board if the image still display with noise.)

3-2.4 Function Troubleshooting

A. OSD Does Not Show up.

- Check the Keypad cable and ensure there is no broken issue on the cable.
- Use Keypad to test again.
  (Replace the Keypad board if the Unit works fine with the new Keypad board.)
- Use the Remote control for the OSD function test.
  (Check the Keypad board and Keypad cable if the Remote control works as well)
- Check the Main board.

B. Function Cannot Be Adjust.

- Check the Keypad cable and ensure there is no broken issue on the cable.
- Use Keypad to test again.
  (Replace the Keypad board if the Unit works fine with the new Keypad board.)
- Use the Remote control for the OSD function Adjustment test.
  (Check the Keypad board and Keypad cable if the Remote control works as well)
- Check the Main board.

3-2.5 Audio Troubleshooting

A. No Sound Output.

- Ensure the Signal cable and Source are work fine.
- Use the new Speaker for the Sound output test.
  (Replace the Speaker if the new Speaker works fine with the Unit.)
- Check the Speaker wire that has broken issue or not.
- Check the Main board.

B. Sound Output With Noise.

- Ensure the Signal cable and Source are work fine.
- Ensure the volume has not select to the max selection.
  (Due to the output power of internal Speaker is 2W only.
  It might has the noise issue if the volume select to the max.)
- Use the new Speaker for the test.
  (Replace the Speaker if the new Speaker works fine with the Unit.)
- Check the Speaker wire that has broken issue or not.
- Check the Main board.

3-2.6 Remote Controller Troubleshooting

A. Remote Controller No Function.

- Check the Laser function of Remote controller.
  (Replace the battery if there is no Laser output from the Remote controller.)
- Use a known Remote controller for the function test.
  (Replace the Remote controller if the new Remote controller works fine with the Unit.)
- Check the Main board if the Unit works fine with a known good Remote controller.

Chapter 4

Function Test and Alignment Procedure

4-1 Product

- EP758/EP759

4-2 Test Equipment

- IBM PC with XGA resolution (Color Video Signal & Pattern Generator)
- DVD player with component video (Y, Pb, Pr) and Multi-system (NTSC/PAL/SECAM)
- HDTV Tuner or Source (480i/p,576i/p,720p,1080i)
- Minolta CL-100
- Quantum data 802B or Chroma 2327

4-3 Test Condition

- Circumstance Brightness
  1.) Dark room less than 10 lux for functional inspection.
  2.) Circumstance brightness over than 500 lux for external inspection.
- Inspection Distance
  1.) About 1.5~3m for functional inspection (The prosection distance has to base on the screen size till 60 inches)
  2.) 30cm for external inspection.
- Screen Size : 60 inches diagonal (wide)
- Each EP758/EP759 should be run-in for 2 hours after repair.
- Each EP758/EP759 should be cooling for 5 minutes after the run-in test.
- Before function test and alignment, each EP759 should be warmed up for 5 minutes.
  1.) In room temperature
  2.) With cycled display colors (R,G,B,White) *Note
- Test Display Mode & Pattern (Refer to 4-4.1 & 4-4.2)
- Function Test and Alignment Procedure

*Note (a) Please enter “Service Mode” to select burn-in function. (For cycled display color mode)
(b) The procedure for enter Service Mode.
Press “Power”,”Up”,”Down”,”Right” button when unit is showing “search the signal” image.

4-4 Test Display Modes & Pattern

4-4.1 Compatible Modes

- Analog

Compatibility	Resolution	V-Sync [Hz]	H-Sync [KHz]
VGA	640x350	70	31.5
	640x350	85	37.9
	640x400	85	37.9
	640x480	60	31.5
	640x480	72	37.9
	640x480	75	37.5
	640x480	85	43.3
	720x400	70	31.5
	720x400	85	37.9
SVGA	800x600	56	35.2
	800x600	60	37.9
	800x600	72	48.1
	800x600	75	46.9
	800x600	85	53.7
XGA	1024x768	43.4	35.5
	1024x768	60	48.4
	1024x768	70	56.5
	1024x768	75	60.0
	1024x768	85	68.7
SXGA	1152x864	70	63.8
	1152x864	75	67.5
	1152x864	85	77.1
	1280x1024	60	63.98
	1280x1024	75	79.98
	1280x1024	85	91.1
SXGA+	1400x1050	60	63.98
UXGA	1600x1200	60	75
MAC LC 13"	640x480	66.66	34.98
MAC II 13"	640x480	66.68	35
MAC 16"	832x624	74.55	49.725
MAC 19"	1024x768	75	60.24
MAC	1152x870	75.06	68.68
MAC G4	640x480	60	31.35
MAC G4	640x480	120	68.03
MAC G4	1024x768	120	97.09
i Mac DV	640x480	117	60
i Mac DV	800x600	95	60
i Mac DV	1024x768	75	60
i Mac DV	1152x870	75	68.49
i Mac DV	1280x960	75	75
i Mac DV	1280x1024	85	91.1

- **Digital**

Compatibility	Resolution	V-Sync [Hz]	H-Sync [KHz]
VGA	640x350	70	31.5
	640x350	85	37.9
	640x400	85	37.9
	640x480	60	31.5
	640x480	72	37.9
	640x480	75	37.5
	640x480	85	43.3
	720x400	70	31.5
	720x400	85	37.9
SVGA	800x600	56	35.2
	800x600	60	37.9
	800x600	72	48.1
	800x600	75	46.9
	800x600	85	53.7
XGA	1024x768	60	48.4
	1024x768	70	56.5
	1024x768	75	60.0
	1024x768	85	68.7
SXGA	1152x864	70	63.8
	1152x864	75	67.5
	1152x864	85	77.1
	1280x1024	60	63.98
	1280x1024	75	79.98
	1280x1024	85	91.1
SXGA+	1400x1050	60	63.98
UXGA	1600x1200	60	75

4-4.2 Function Test Display Pattern

- **PC Signal**

Item	Test Content	Pattern	Specification	Remark
1	Frequency & Tracking	Fine Line Moire	Eliminate visual wavy noise by Rsync, Frequency or Tracking selection.	Figure 1
2	Contrast/Brightness	16 Gray Scale / 64 RGBW scale	Gray level should be distinguishable and without color abnormal.	Figure 2,3
3	R, G, B and White Color Performance	R, G, B and White Color	Each R, G, B color should be normal without color abnormal issue.	Figure 4~7
4	Screen Uniformity	Full White	Should be compliant with 65%.(Minimum)	Figure 7
5	Dead Pixel (Bright pixel)	Full Black	Cannot accept any bright pixel	Figure 8
	Dead Pixel (Dark pixel)	Full White	The numbers of dead pixel should be smaller or amount to 6 pixel.	Figure 7
6	Blemish (Bright)	Full Black / Gray 30	The bright blemish cannot be accept if the problem appear with Gary 30 pattern.	Figure 8, 9
7	Blemish (Dark)	Full white / Blue 60	The dark blemish cannot be accept if the problem appear with Blue 60 pattern.	Figure 7,10
8	Focus	Text Pattern	The text in the corner should be clear after adjust the focus ring.	Figure 11
9	Boundary	Boundary Frame	Horz. And Vert. position of video should be adjustable to be the screen frame.	Figure 12

Figure 1. Fine Line Moire

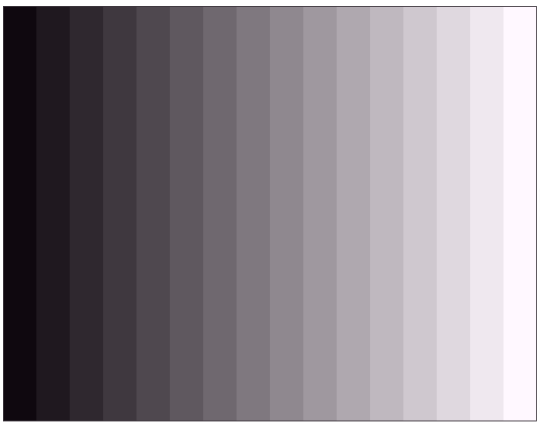


Figure 2.Gray Scale Pattern

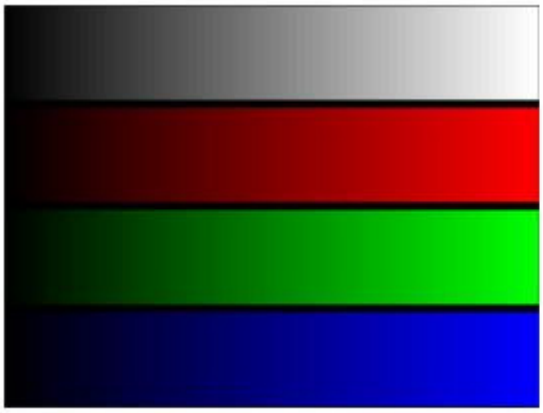


Figure 3. 64 RGBW Scale

Figure 4. Red Pattern

Figure 5. Green Pattern

Figure 6. Blue Pattern

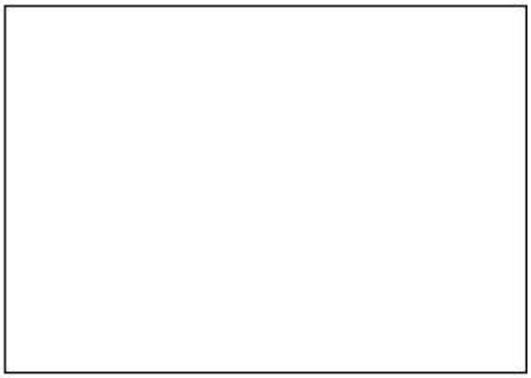


Figure 7. Full White

Figure 8. Full Black

Figure 9. Gray 30 Pattern

Figure 10. Blue 60 Pattern

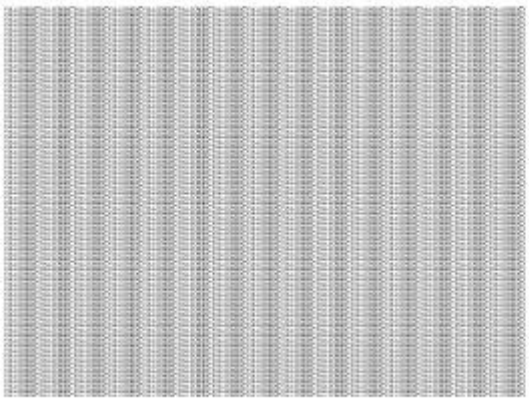


Figure 11. Text Pattern

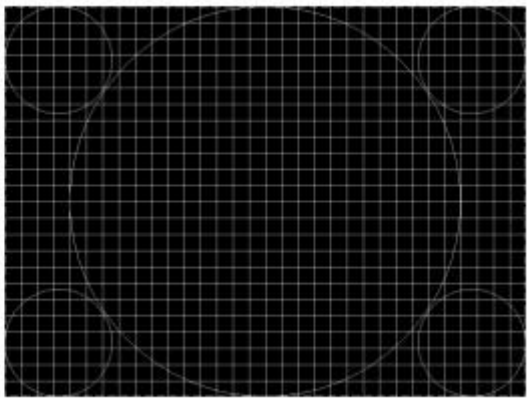


Figure 12. Boundary Frame

- Video & Audio Signal

Item	Test Content	Specification
1	Composite Video	The input signal has to display without color abnormal.
2	S-Video	The input signal has to display without color abnormal.
3	Component Video	The input signal has to display without color abnormal.
4	HDTV	The input signal has to display without color abnormal.
5	Audio	The audio should be output without noise. The audio selection of OSD should be functionally.

4-5 Inspection Procedure

- **Elevator Function**
  1. Please check and ensure the function of elevator is work as well.
  2. If not, please return the unit to repair area.

- **Keypad Function (Including Remote Control)**
  1. Please check and ensure the control function of keypad is work as well.
  2. If not, please return the unit to repair area.

- **Clock and Clock phase**

  Test Signal:1024 x 768 @ 75Hz

  Test Pattern:Fine Line Moire Pattern
  1. Check and see If image sharpness and focus in well performed.
  2. If not, readjust by following steps.
     (a) Enter Image-I, and then select "Frequency" function to adjust the total pixel number of pixel clock in one line period.
     (b) Then select "phase" function and use right or left button to adjust the value to minimize video flicker.

- **R, G, B and white color contrast**

  Test Signal:1024 x 768 @ 75Hz

  Test Pattern:64 RGBW scale pattern
  1. Please check and ensure if each color is normal and distinguishable.
  2. If not, please return the unit to repair area.

- **Screen Uniformity**

  Test Signal:1024 x 768 @ 75Hz

  Test Pattern:Full white pattern
  1. Please check and ensure the unit is under the spec. (60% Minimum)
  2. If not, please return the unit to repair area.

- **Dead pixel (Bright pixel)**

  Test Signal:1024 x 768 @ 75Hz

  Test Pattern:Full black pattern
  1. Please check and ensure the unit is under the spec. (Cannot accept any bright pixel)
  2. If not, please return the unit to repair area.

- **Dead pixel (Dark pixel)**

  Test Signal:1024 x 768 @ 75Hz

  Test Pattern:Full white pattern

  1. Please check and ensure the unit is under the spec. (Pixel number should be smaller or amount to 6 pixels)
  2. If not, please return the unit to repair area.

- **Blemish (Bright)**

  Test Signal:1024 x 768 @ 75Hz

  Test Pattern:Full black and Gray 30 patterns

  1. Please check and ensure the unit is under the spec. (The bright blemish should not be able to see under Gray 30 pattern)
  2. If not, please return the unit to repair area.

- **Blemish (Dark)**

  Test Signal:1024 x 768 @ 75Hz

  Test Pattern:Full white and Blue 60 patterns

  1. Please check and ensure the unit is under the spec. (The dark blemish should not be able to see under Blue 60 pattern)
  2. If not, please return the unit to repair area.

- **Focus**

  Test Signal:1024 x 768 @ 75Hz

  Test Pattern:Text pattern

  1. Please check and ensure the unit is under the spec. (The text in the corner should be able to see with clear)
  2. If not, please return the unit to repair area.

- **Boundary**

  Test Signal:1024 x 768 @ 75Hz

  Test Pattern:Boundary frame pattern

  1. Please check and ensure the unit is under the spec. (The horizontal and vertical position of image should be adjustable to be the screen frame.)
  2. If not, please return the unit to repair area.

- **Video**

  Test Signal:Composite video,S-Video and Component video

  Test Pattern:NTSC,PAL,SECAM

  1. Please check and ensure the unit can display the video signal without color abnormal or image abnormal issue.
  2. If not, please return the unit to repair area.

- **HDTV**

  Test Signal:HDTV signal

  Test Pattern:480i/p,576i/p,720p,1080i

  1. Please check and ensure the unit can display the HDTV signal without color abnormal or image abnormal issue.
  2. If not, please return the unit to repair area.

- **Audio**

  1. Please check and ensure the function of audio is work as well. (Volume,Treble,Bass,Mute)
  2. If not, please return the unit to repair area.

- **Reset All**

  After final QC step, we have to erase all saved change again and restore the factory defaults. Please select and enter “Factory Reset” function of “Service Mode” to ensure the function is work as well. This action will allow you erase all end-user’s settings and restore the original factory setting.

Chapter 5

Firmware Upgrade Procedure

5-1 Equipment Needed

Software :

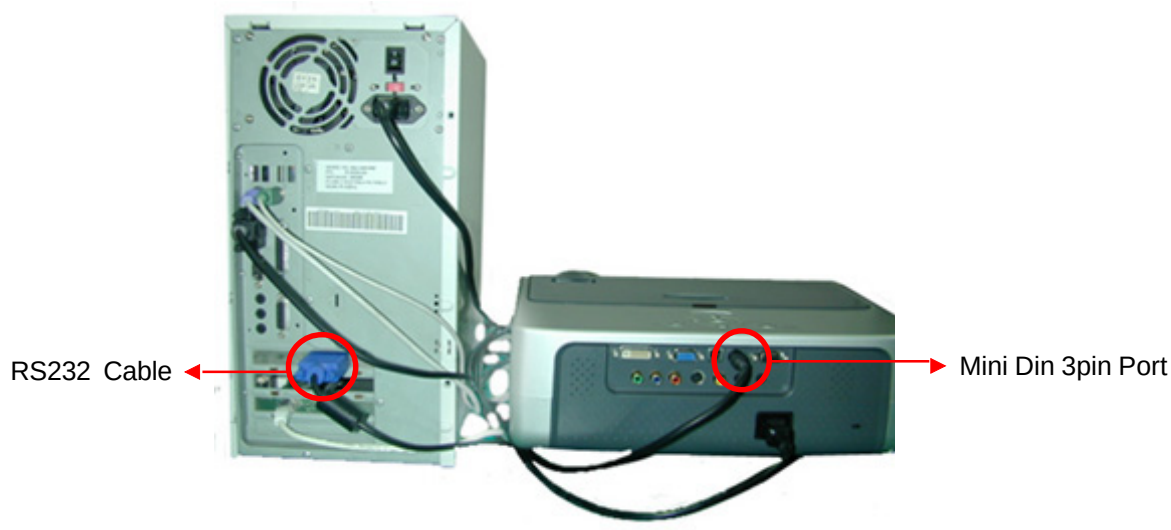
- Config.hex
- Flasher.hex
- FlashUpgrader.exe
- Gui.exe
- Pixelware.inf
- Romcode.hex

Hardware :

- Power Cord
- Cable RS232 To Mini Din 3Pin
- PC or Laptop
- EP758/EP759 Projector

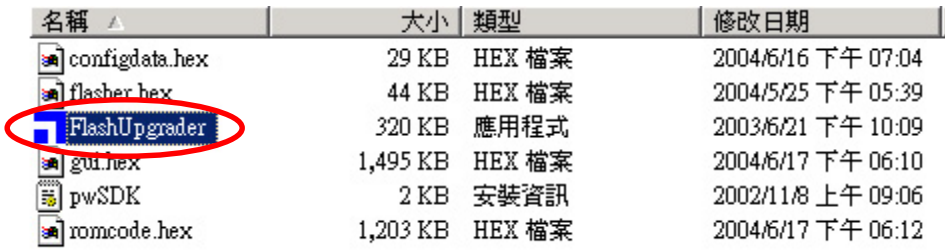
5-2 Hardware Setup Procedure

1. Connecting RS232 Cable between PC and EP758/EP759 Projector.



5-3 Firmware Progarm Installation Procedure

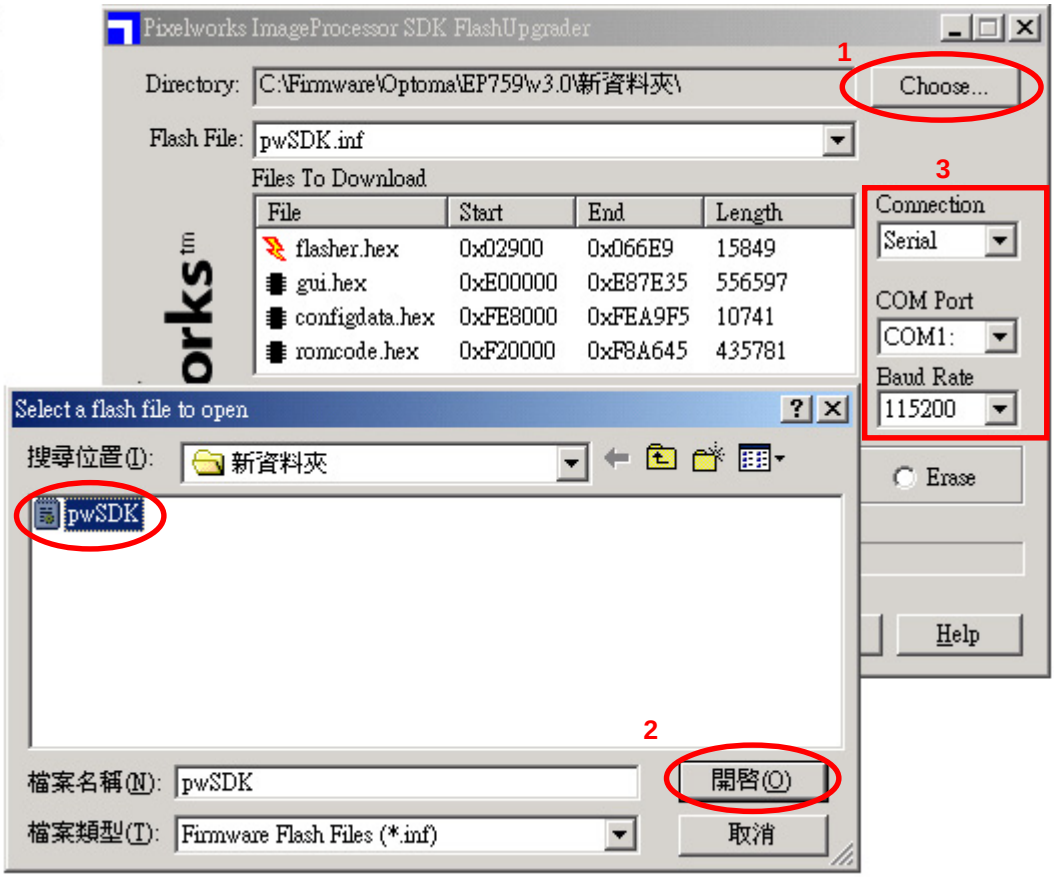
Step1. Execute the “FlashUpgrader.exe” program.


名稱
大小
類型
修改日期
configdata.hex 29 KB HEX 檔案 2004/6/16 下午 07:04
flasher.hex 44 KB HEX 檔案 2004/5/25 下午 05:39
FlashUpgrader 320 KB 應用程式 2003/6/21 下午 10:09
gui.hex 1,495 KB HEX 檔案 2004/6/17 下午 06:10
pwSDK 2 KB 安裝資訊 2002/11/8 上午 09:06
romcode.hex 1,203 KB HEX 檔案 2004/6/17 下午 06:12

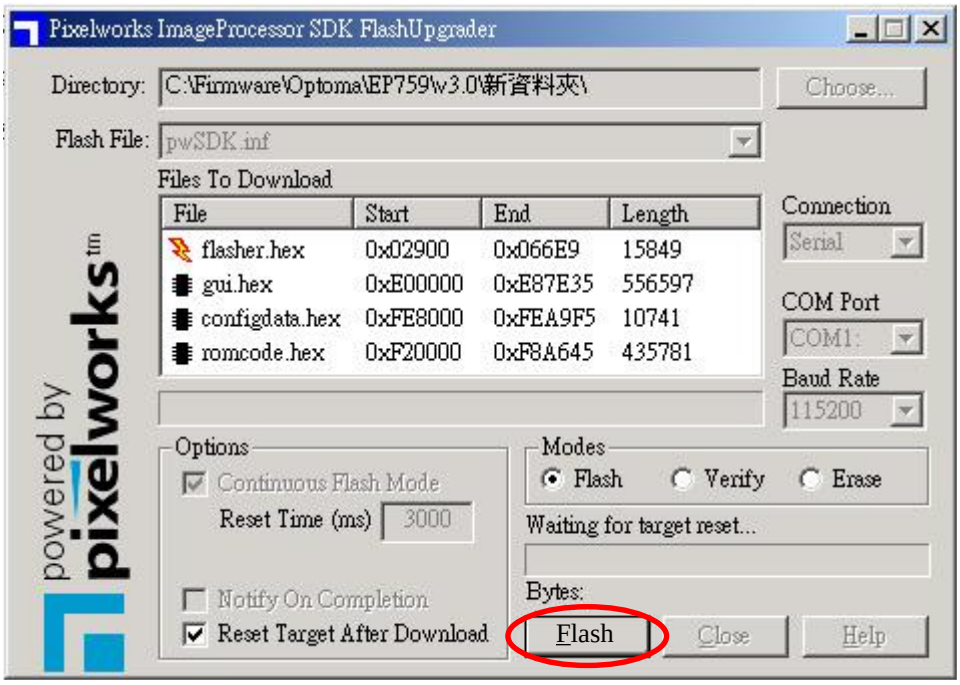
Step2. 1. Click ”Choose” to get the file directory

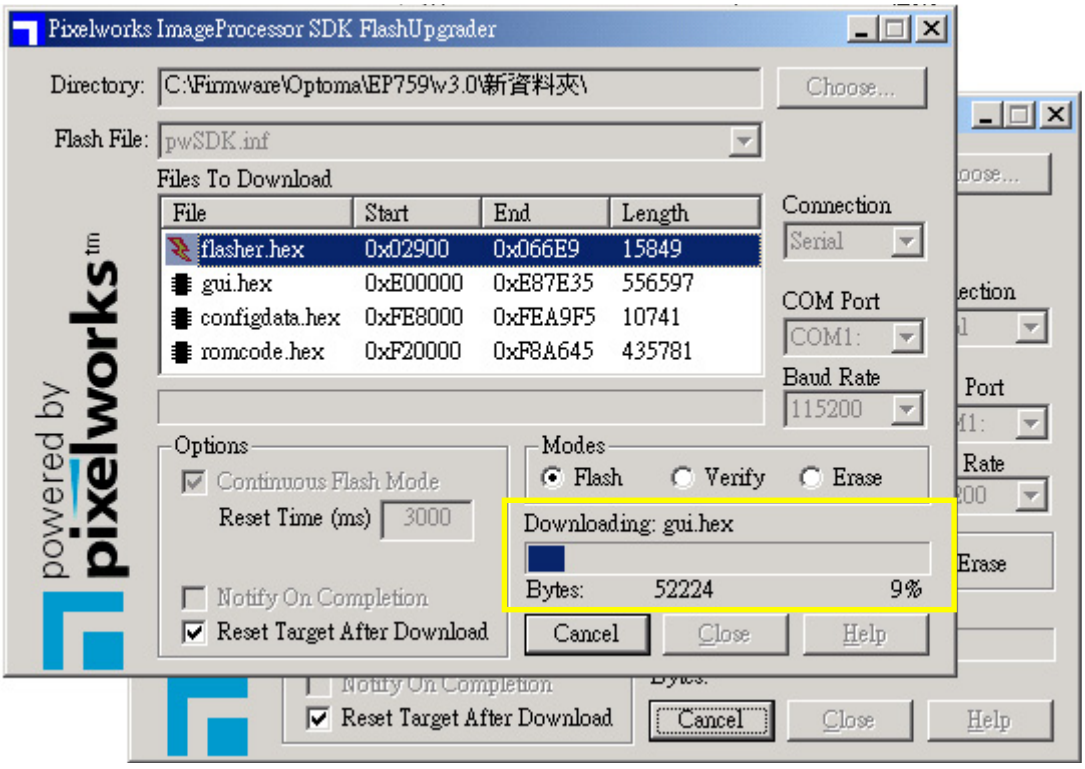
2. Select <pwSDK.inf> file and open it.

3. Select the Serial port in Connection field, COM1: in COM Port field and 115200 in Baud Rate field.



Step3. Click “Flash” to start the firmware upgrade procedure and keep press the projector’s power button immediately until download “gui.hex” to 10%.





Step4. After downloading all files, enter the service mode to check the F/W version. *Notice

Notice: *Press the "Power" button to enter in shutdown screen.*
Press "Up", "Down", "Right" button, and then enter the service mode to check the F/W version.

Chapter 6

DDC Key-in Procedure

6-1 Equipment Needed

- PC or Laptop (OS:Windows98 or Windows Me)
- EDID Fixture
- DFP to DVI Cable
- Power Adapter
- RS-232 Cable
- VGA Cable
- Power Cord
- DDC Driver
- EP758/EP759

6-2 Setup Procedure

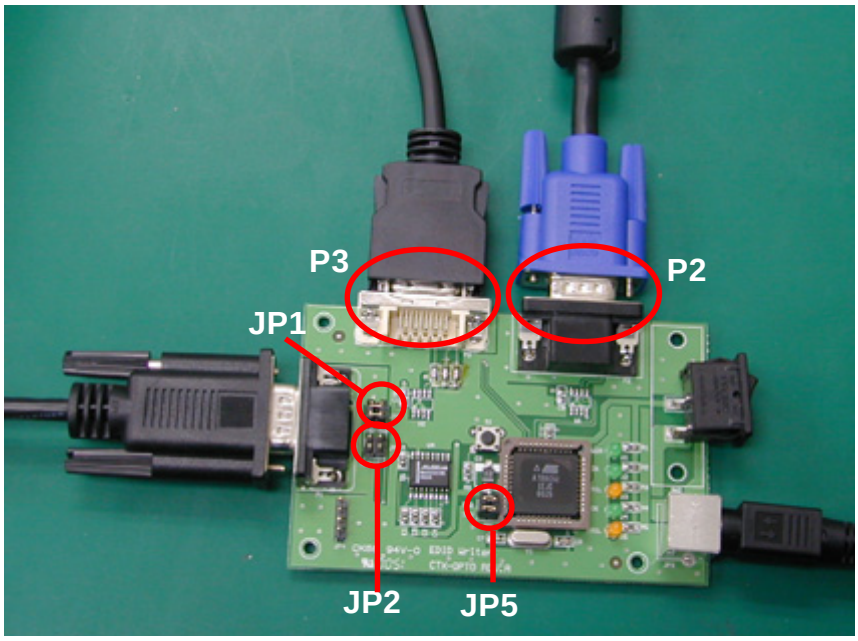
Step1. Connect Power Adapter with fixture.

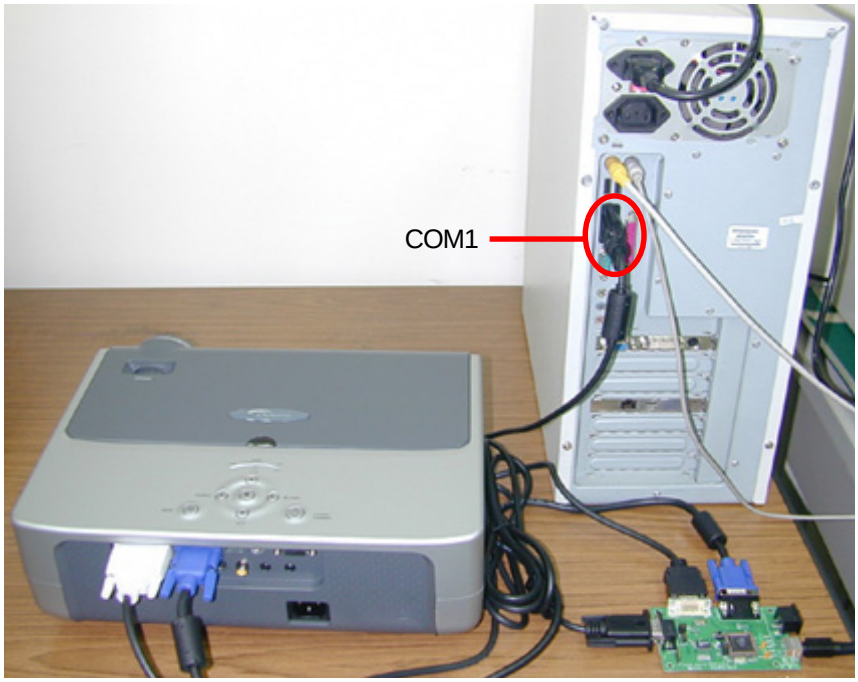
Step2. Make sure the JP1and JP5 are close and JP2 is open.

Step3. Connect P2 of the fixture with VGA Port of EP758/EP759 by the VGA Cable.

Step4. Connect P3 of the fixture with DVI Port of EP758/EP759 by the DFP to DVI cable.

Step5. Turn on the power of the fixture.



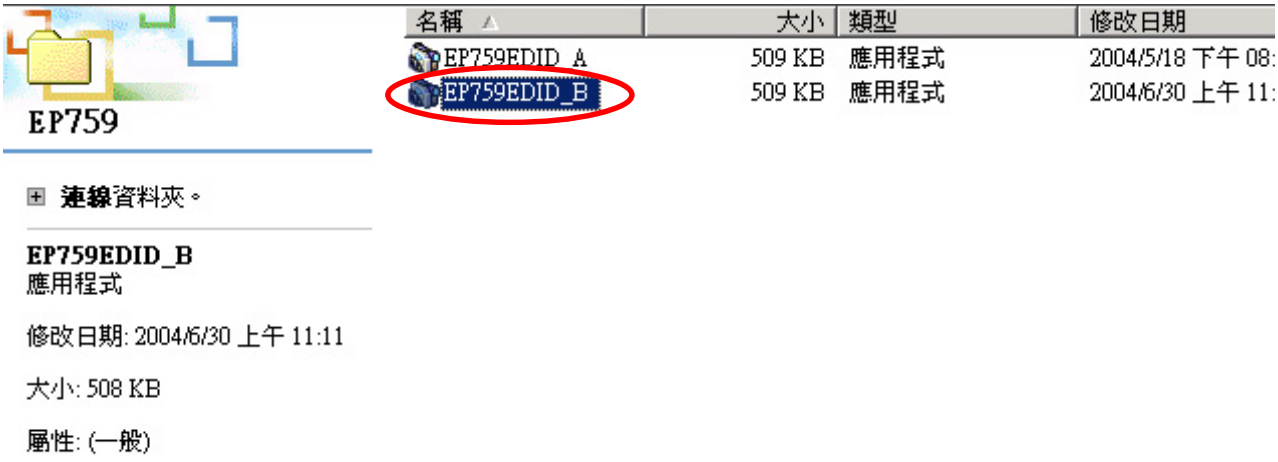


6-3 DDC Key-in Procedure

6-3.1 Analog

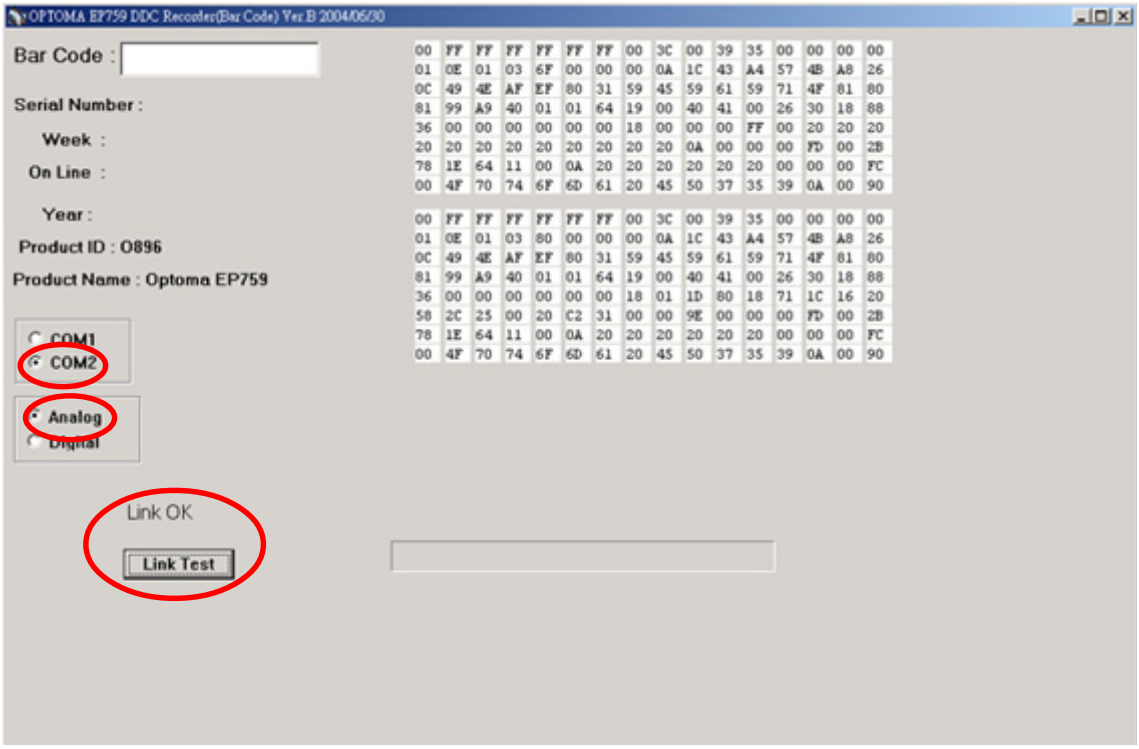
Step1. Execute “EP759 EDID_B” program.

*Note: If the unit is EP758, Please execute “EP758 EDID_B” program.

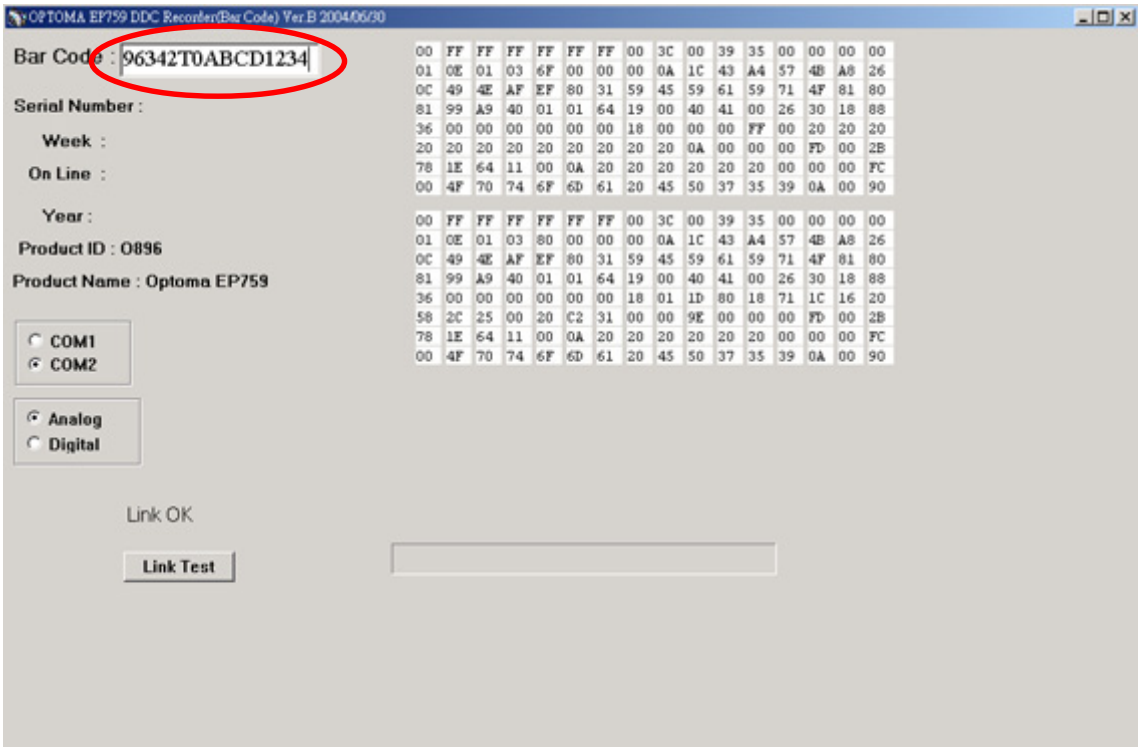


Step2. Mark sure the COM port is connecting ok.

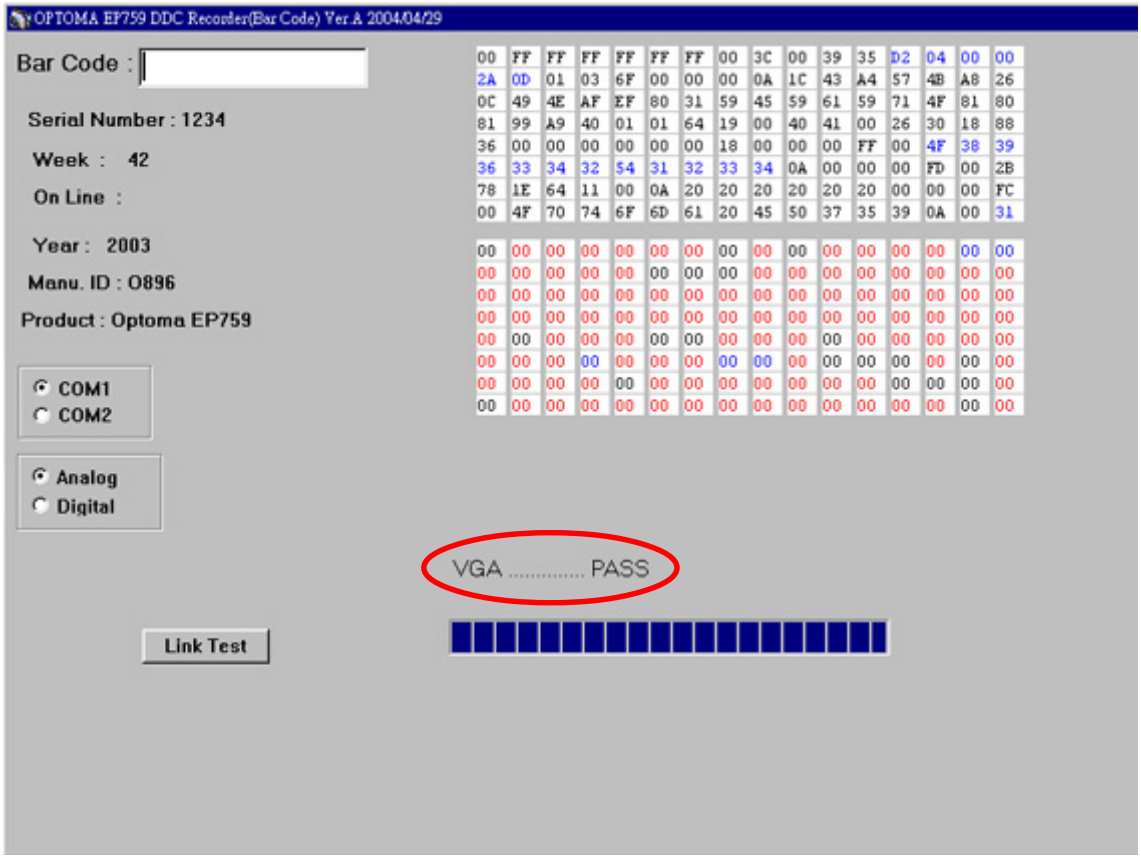
Choose the “Analog” to do the Analog DDC procedure.



Step3. Key-in S/N in to the blank beside Barcode, and than press “Enter” key on the keyboard to begin programming.



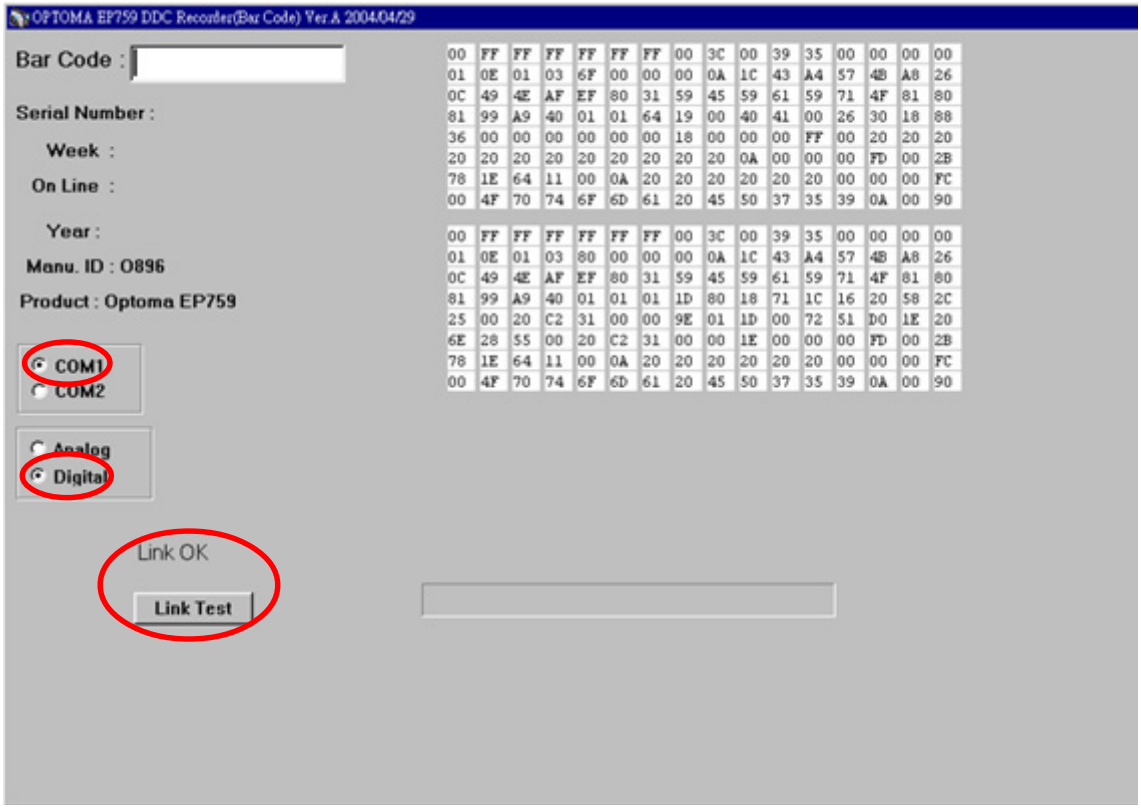
Step4. After finishing the above action, “PASS” message will appear on the screen.



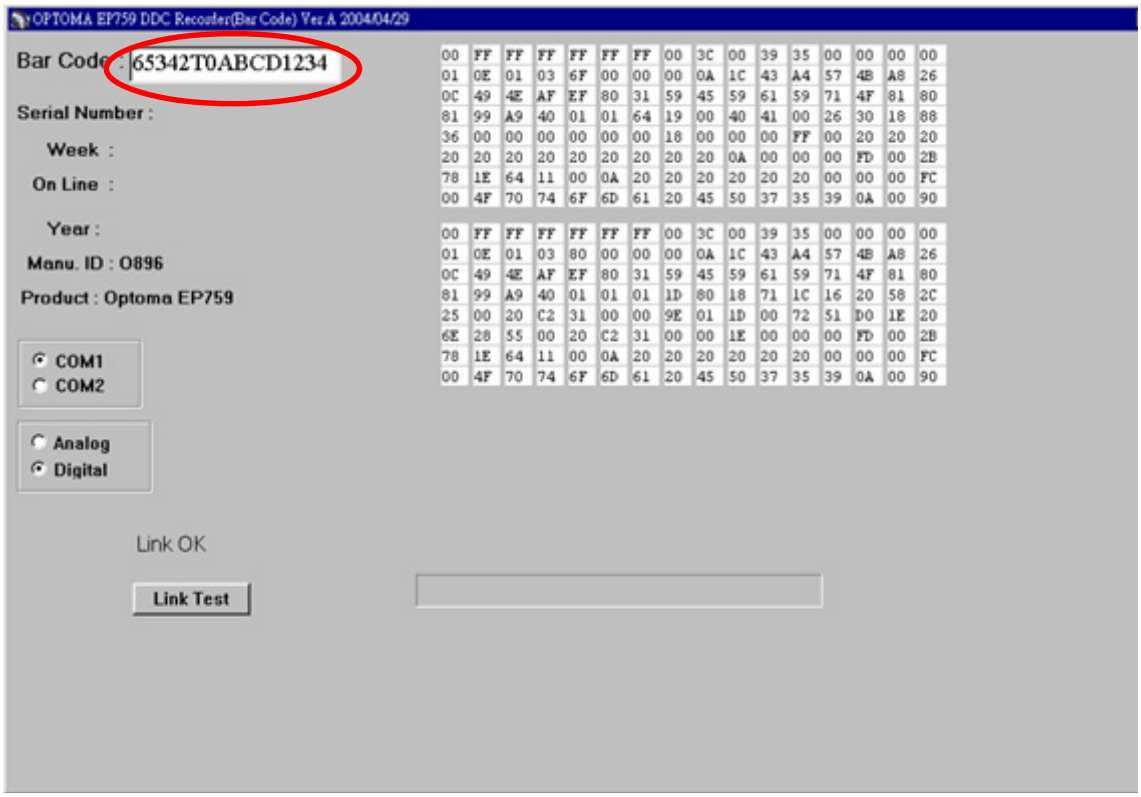
6-3.2 Digital

Step1. Mark sure the COM port is connecting ok.

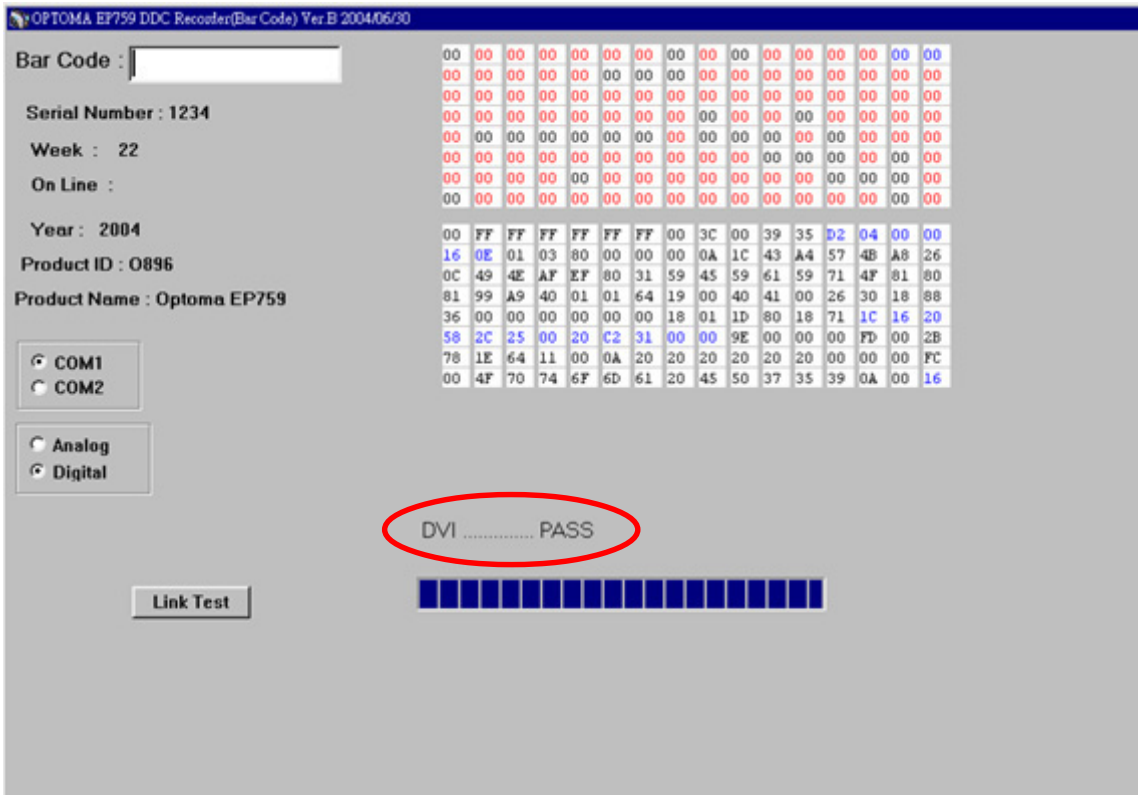
Choose the “Digital” to do the Digital DDC procedure.



Step2. Key-in S/N in to the blank beside Barcode, and than press “Enter” key on the keyboard to begin programming.



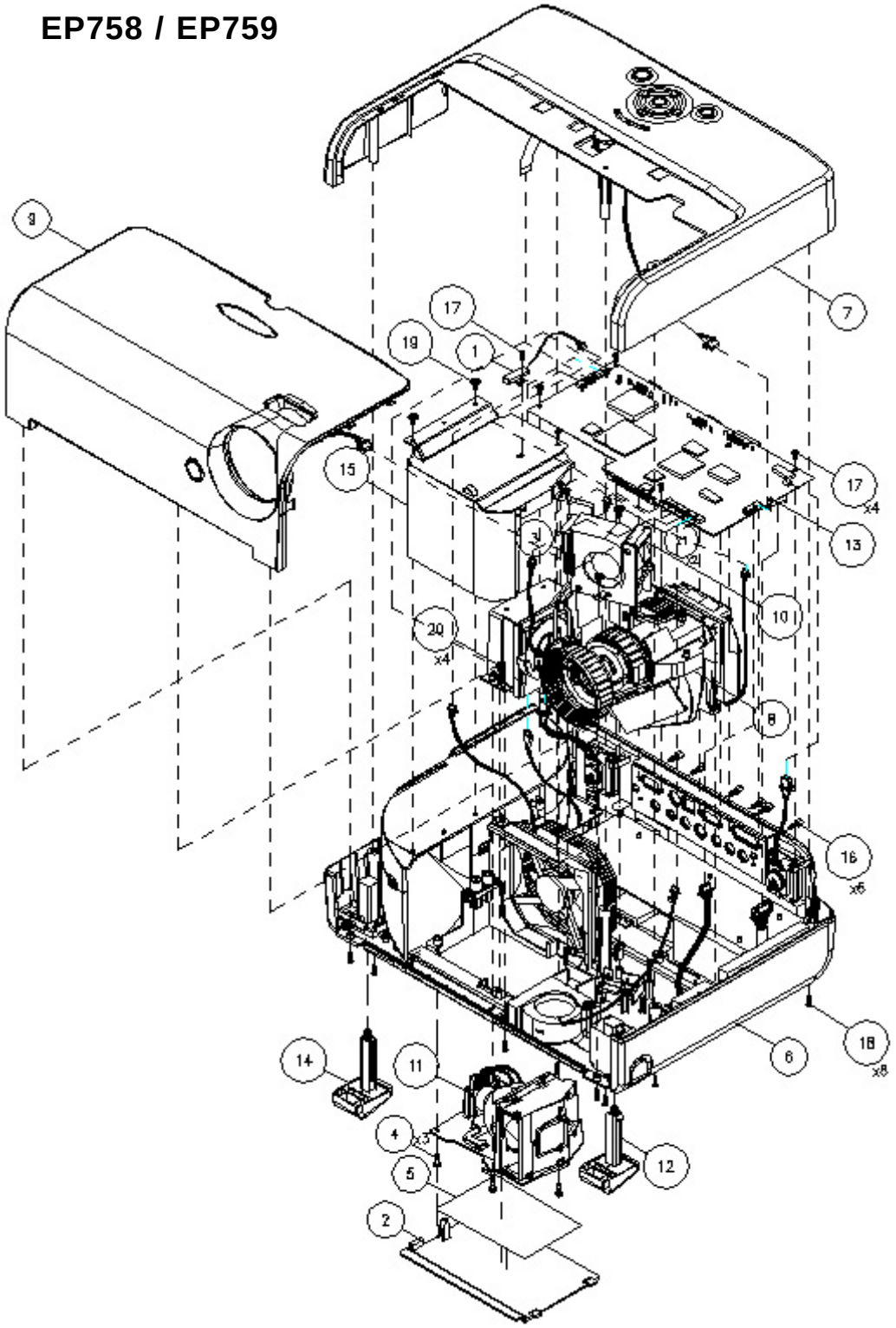
Step3. After finishing the above action, “PASS” message will appear on the screen.



Appendix A

Exploded Overview

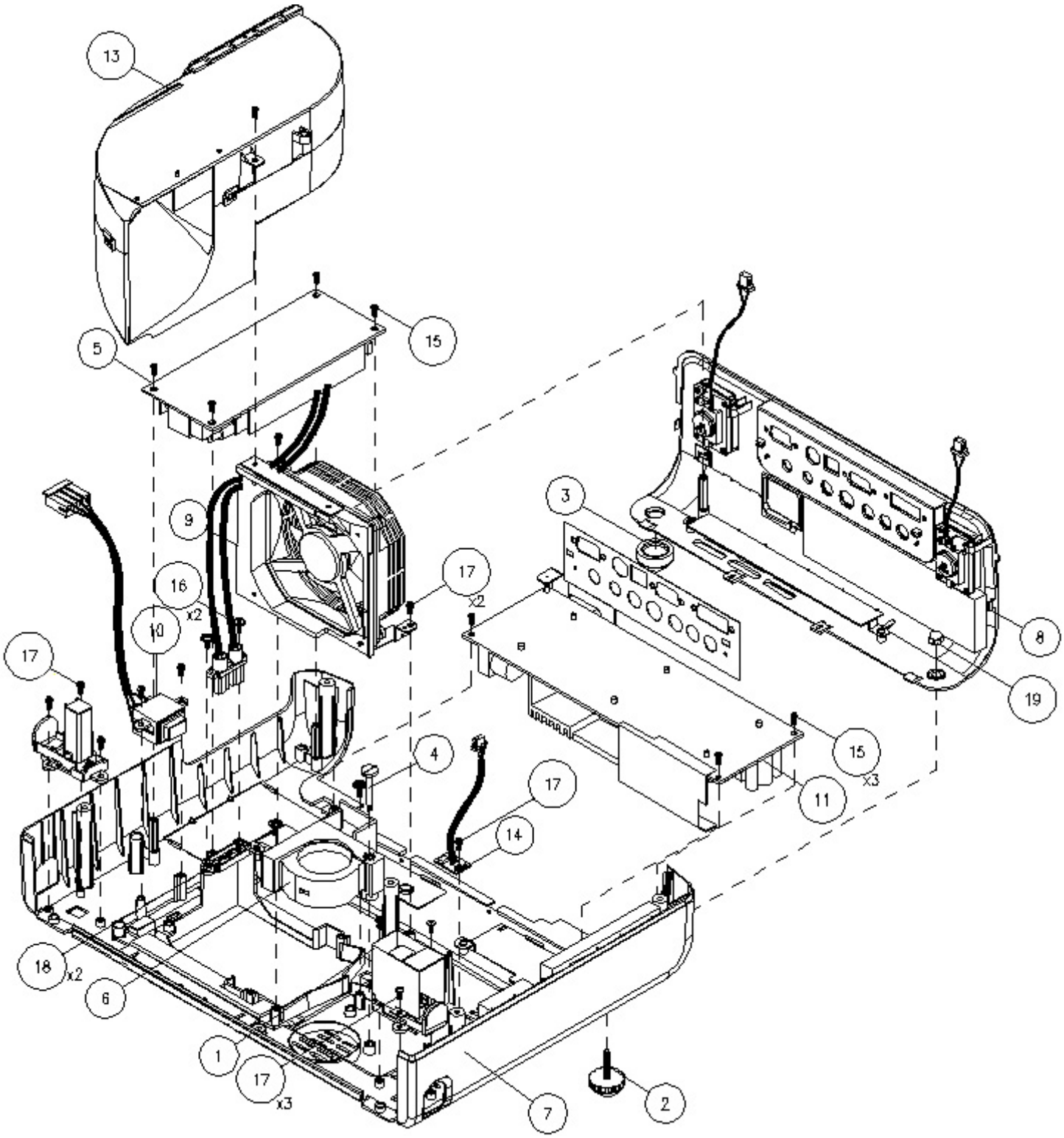
I. EP758 / EP759



Exploded Parts List of EP758 / EP759

21	85.WD123.080	SCREW PAN TAP M3*8 W/WASHER Ni
20	85.WA123.060	SCREW PAN TAP M3*6 (Ni)
19	85.TA326.070	SCREW CAP TAP M2.6*7 WASHER BLACK
18	85.1A123.080	SCREW PAN MECH M3*8 NI
17	85.1A123.060	SCREW PAN MECH M3*6 NI
16	85.005AG.408	SCREW HEX I/O #4-40 H4xL8 Ni NYLOK
15	75.89604.001	ASSY FAN GUIDER COVER MODULE EP759
14	70.89625.001	ASSY ELEVATOR FOOT LEFT MODULE EP759
13	70.89624.001/70.81C08.001	ASSY MAIN BOARD MODULE EP759/EP758
12	70.89621.001	ASSY ELEVATOR FOOT RIGHT MODULE EP759
11	70.89614.001/70.81C02.001	ASSY LAMP CHANGER MODULE EP759 /EP758
10	70.89608.001	ASSY BLOWER FAN 60X25 MODULE EP759
9	70.89604.001/70.81C04.001	ASSY FRONT COVER MODULE EP759 /EP758
8	70.89603.001/70.81C06.001	ASSY ENGINE MODULE EP759; YO PARTS /EP758
7	70.89602.001	ASSY TOP COVER MODULE EP759
6	70.89601.001/70.81C01.001	ASSY BOTTOM HOUSING MODULE EP759 /EP758
5	61.89641.001	LAMP COVER AL FOIL 0.1t EP759
4	61.00018.002	LOCK SCREW PAN MECH M3*8.5-3.5 B
3	52.89611.001	DUCT RUBBER EP759
2	51.89607.001	LAMP COVER NORYL N300 EP759
1	43.87301.001	90C TI THERMAL SWITCH
ITEM	PART_NO	PART_NAME

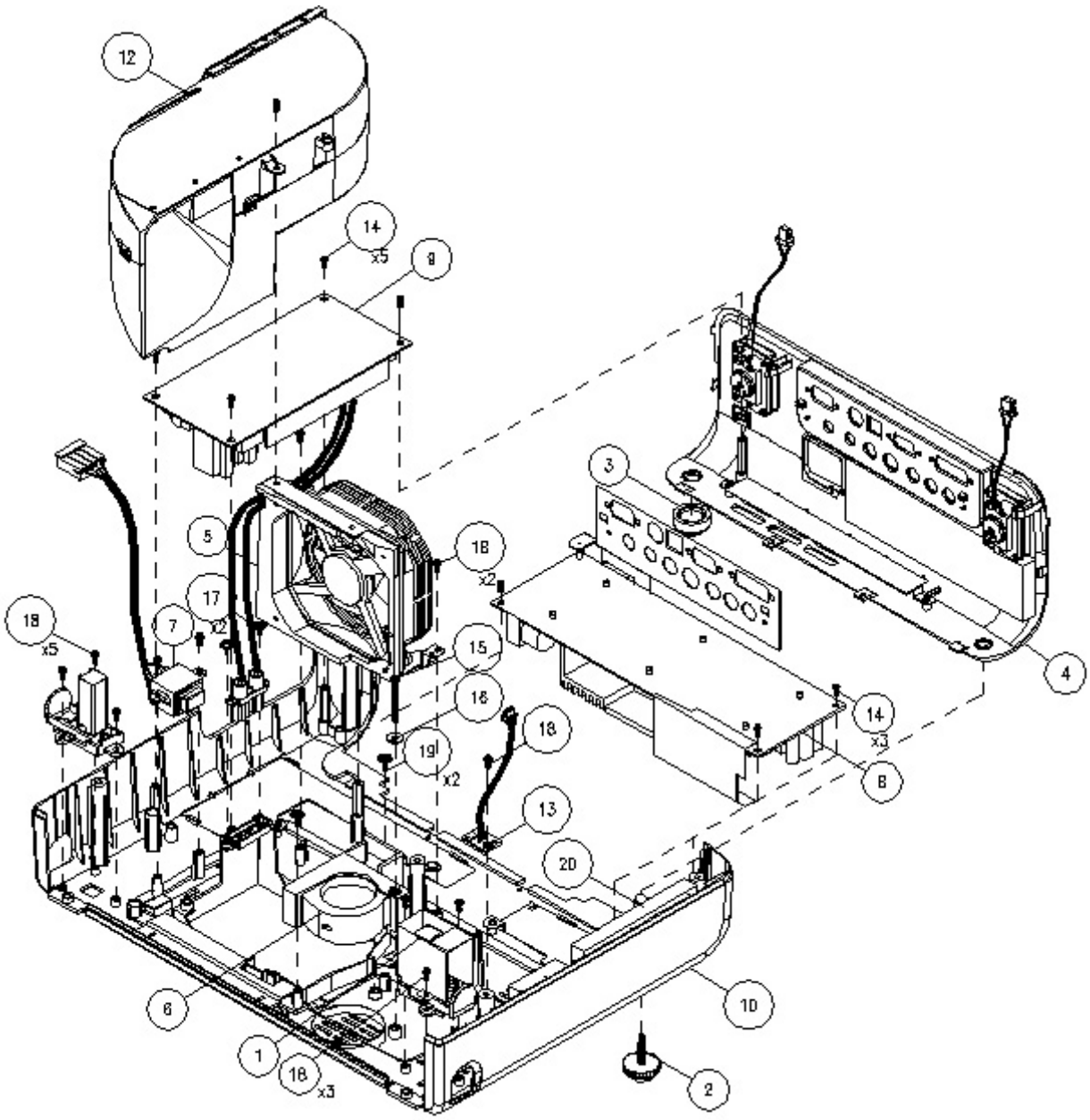
II. EP758 Bottom Housing Module



Exploded Parts List of EP758 Bottom Housing Module

19	86.03123.035	HEX CAP HEAD M3*0.5P L3.5 Ni
18	85.WD123.080	SCREW PAN TAP M3*8 W/WASHER Ni
17	85.WA123.060	SCREW PAN TAP M3*6 (Ni)
16	85.TA326.070	SCREW CAP TAP M2.6*7 WASHER BLACK
15	85.1A123.060	SCREW PAN MECH M3*6 NI
14	80.83405.001	PCBA THERMAL SENSOR BD EzPro 730/735 ID=90
13	75.89608.001	ASSY WIND TUNNEL MODULE EP759
12	75.89607.001	ASSY PRE ELEVATOR MODULE EP759
11	70.89613.001	ASSY LVPS MODULE EP759
10	70.89612.001	ASSY INTERRUPT SWITCH MODULE EP759
9	70.89606.001	ASSY AXIAL FAN 92x25 MODULE EP759
8	70.89605.001	ASSY BACK COVER MODULE EP759
7	70.81C10.001	ASSY BOTTOM COVER MODULE EP758
6	70.81C05.001	ASSY BLOWER FAN 50X20 MODULE EP758
5	70.81C03.001	ASSY LAMP DRIVER MODULE
4	61.89645.001	SCREW FOR 5020BLOWER MECH M3x28 Ni EP759
3	52.89605.001	REAR FOOT RUBBER EP759
2	52.89601.001	ADJUST FOOT RUBBER EP759
1	51.89633.001	ELEVATOR SHADING MYLAR EP759
ITEM	PART_NO	PART_NAME

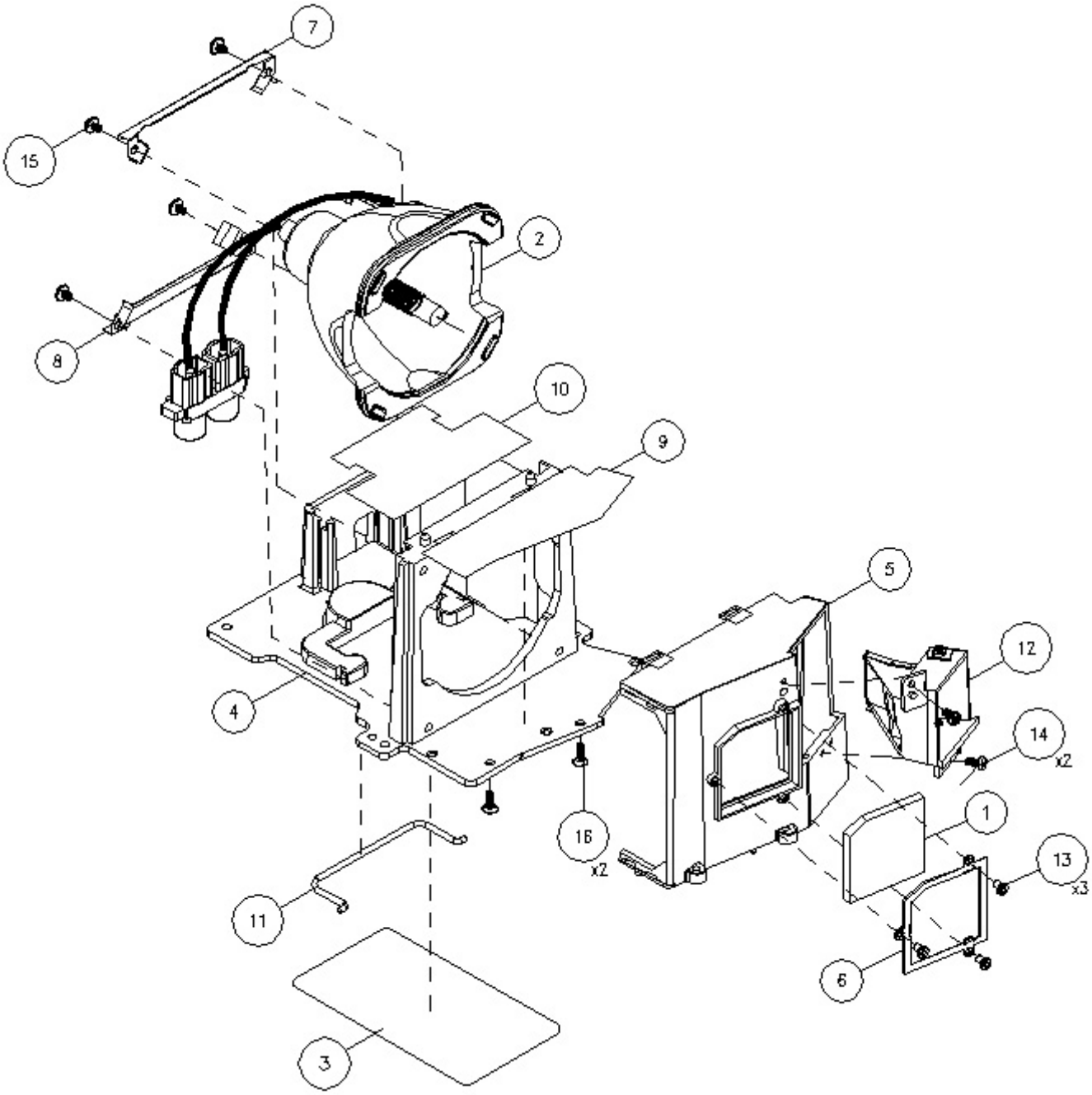
III. EP759 Bottom Housing Module



Exploded Parts List of EP759 Bottom Housing Module

20	86.03123.035	HEX CAP HEAD M3*0.5P L3.5 Ni
19	85.WD123.080	SCREW PAN TAP M3*8 W/WASHER Ni
18	85.WA123.060	SCREW PAN TAP M3*6 (Ni)
17	85.TA326.070	SCREW CAP TAP M2.6*7 WASHER BLACK
16	85.FL431.005	WASHER FLAT 8x3.2x0.5 Ni
15	85.1A323.300	SCREW PAN MECH M3*30 BLACK
14	85.1A123.060	SCREW PAN MECH M3*6 NI
13	80.83405.001	PCBA THERMAL SENSOR BD EzPro 730/735 ID=90
12	75.89608.001	ASSY WIND TUNNEL MODULE EP759
11	75.89607.001	ASSY PRE ELEVATOR MODULE EP759
10	70.81C10.001	ASSY BOTTOM COVER MODULE EP759
9	70.89615.001	ASSY LAMP DRIVER MODULE EP759
8	70.89613.001	ASSY LVPS MODULE EP759
7	70.89612.001	ASSY INTERRUPT SWITCH MODULE EP759
6	70.89607.001	ASSY BLOWER FAN 50X20 MODULE EP759
5	70.89606.001	ASSY AXIAL FAN 92x25 MODULE EP759
4	70.89605.001	ASSY BACK COVER MODULE EP759
3	52.89605.001	REAR FOOT RUBBER EP759
2	52.89601.001	ADJUST FOOT RUBBER EP759
1	51.89633.001	ELEVATOR SHADING MYLAR EP759
ITEM	PART_NO	PART_NAME

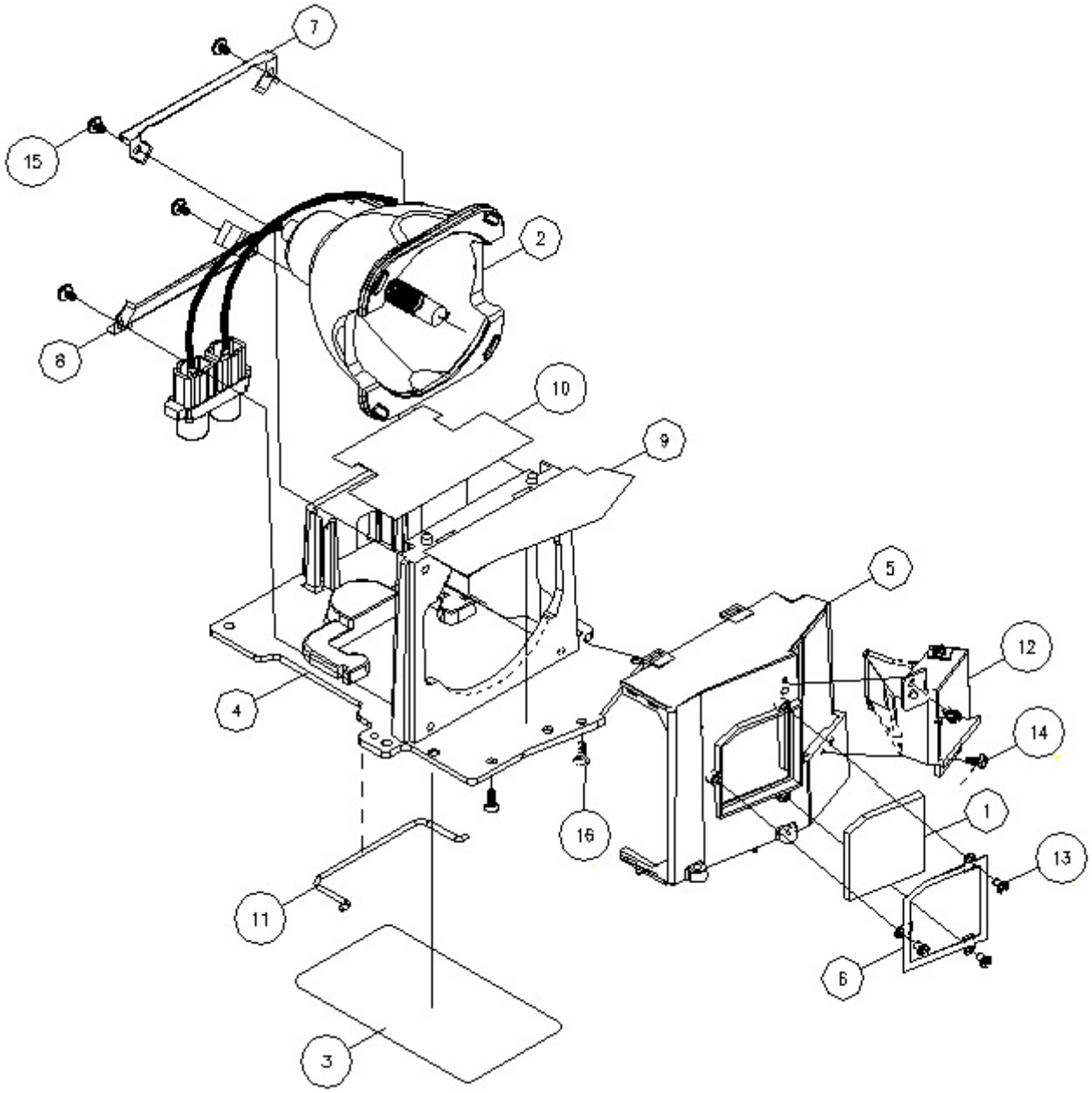
IV. EP758 Lamp Changer Module



Exploded Parts List of EP758 Lamp Changer Module

16	85.4A326.060	SCREW FLAT MECH M2.6*6 BLACK
15	85.1D122.030	SCREW PAN MECH M2*3 Ni (W/WASHER D5.0)
14	85.1A122.040	SCREW PAN MECH M2x4 Ni
13	85.0A122.030	SCREW DOBULE FLAT MECH M2*3 Ni
12	70.89622.001	ASSY DUCT MODULE EP759
11	61.89639.001	LAMP EXCHANGE HANDLER FOR EP759
10	61.89637.001	LAMP CHANGER AL FOIL BACK EP759
9	61.89636.001	LAMP CHANGER AL FOIL FRONT EP759
8	61.89619.001	LAMP CLIP PUSH SUS301 0.25t EP759
7	61.89618.001	LAMP CLIP HOLDER SUS301 0.25t EP759
6	61.89606.001	UV-IR BRACKET SPRING SUS301 0.3t EP759
5	61.89603.001	LAMP MESH HOLDER Mg ALLOY AZ91D EP759
4	51.89621.001	LAMP CHANGER PPS EP759
3	35.81C01.001	LAMP WARING LABEL 250W FOR EP758
2	23.89515.012	PHILIPS 250W 1.35 ARC E21.8 DELL
1	23.89610G002	BOROFLOAT UV-IR SQUARE t2.75mm "GREEN"
ITEM	PART_NO	PART_NAME

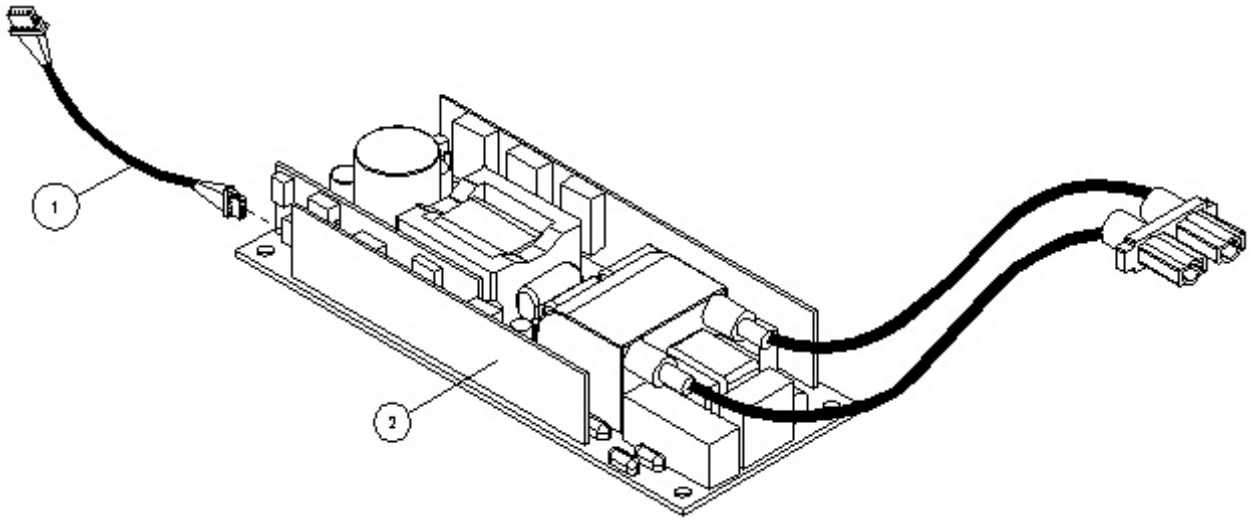
V. EP759 Lamp Changer Module



Exploded Parts List of EP759 Lamp Changer Module

16	85.4A326.060	SCREW FLAT MECH M2.6*6 BLACK
15	85.1D122.030	SCREW PAN MECH M2*3 Ni (W/WASHER D5.0)
14	85.1A122.040	SCREW PAN MECH M2x4 Ni
13	85.0A122.030	SCREW DOBULE FLAT MECH M2*3 Ni
12	70.89622.001	ASSY DUCT MODULE EP759
11	61.89639.001	LAMP EXCHANGE HANDLER FOR EP759
10	61.89637.001	LAMP CHANGER AL FOIL BACK EP759
9	61.89636.001	LAMP CHANGER AL FOIL FRONT EP759
8	61.89619.001	LAMP CLIP PUSH SUS301 0.25t EP759
7	61.89618.001	LAMP CLIP HOLDER SUS301 0.25t EP759
6	61.89606.001	UV-IR BRACKET SPRING SUS301 0.3t EP759
5	61.89603.001	LAMP MESH HOLDER Mg ALLOY AZ91D EP759
4	51.89621.001	LAMP CHANGER PPS EP759
3	35.89602.001	LAMP WARING LABEL 300W FPR EP759
2	23.80L15.001	OSRAM LAMP E21.8 1.3mm ARC 300W
1	23.89610-002	BOROFLOAT UV-IR SQUARE t2.75mm "GREEN"
ITEM	PART_NO	PART_NAME

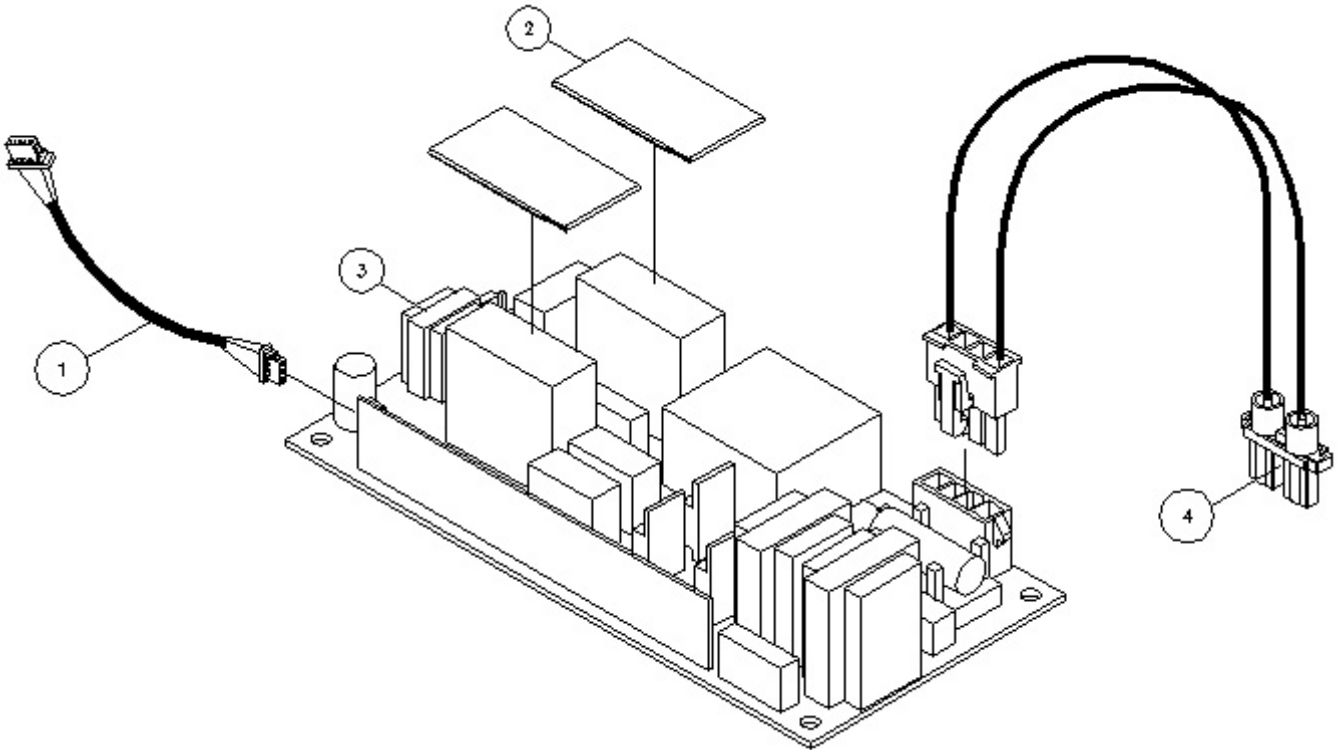
VI. EP758 Lamp Driver Module



Exploded Parts List of EP758 Lamp Driver Module

2	75.81C01.001	ASSY HITACHI LAMP DRIVER EP758
1	42.81C02.001	W.A. 5P #28 140mm BALLAST/MAIN BD EP758
ITEM	PART NO	PART NAME

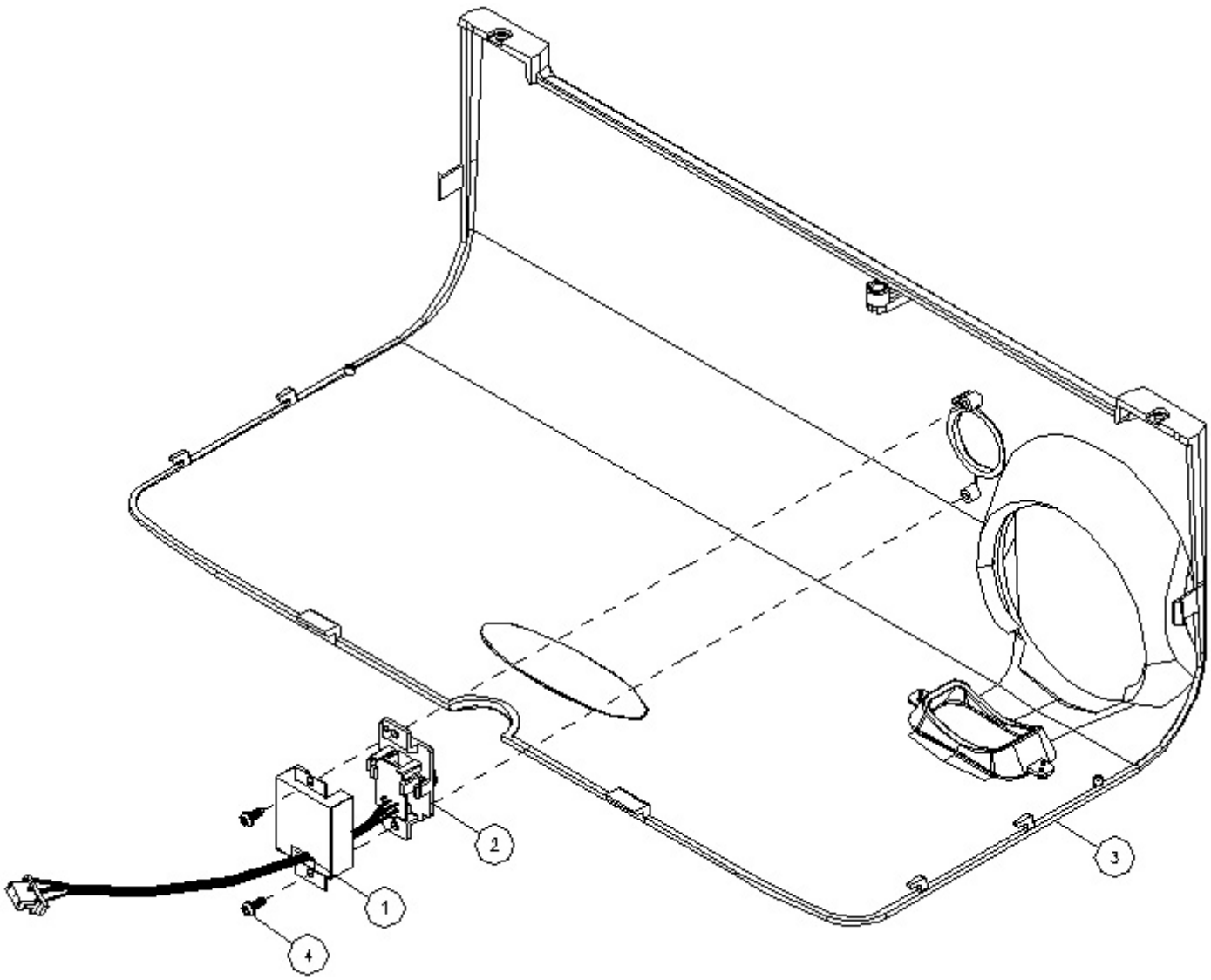
VII. EP759 Lamp Driver Module



Exploded Parts List of EP759 Lamp Driver Module

4	76.89601.001	ASSY LAMP DRIVER TO LAMP SMK W.A. EP759
3	75.80L01.002	ASSY OSRAM 300W NEW TYPE-04
2	51.89639.001	LAMP DRIVER EMI MYLAR EP759
1	42.89608.001	W.A. 5P #28 140mm LAMP DRIVER TO MAIN BD EP759
ITEM	PART NO	PART NAME

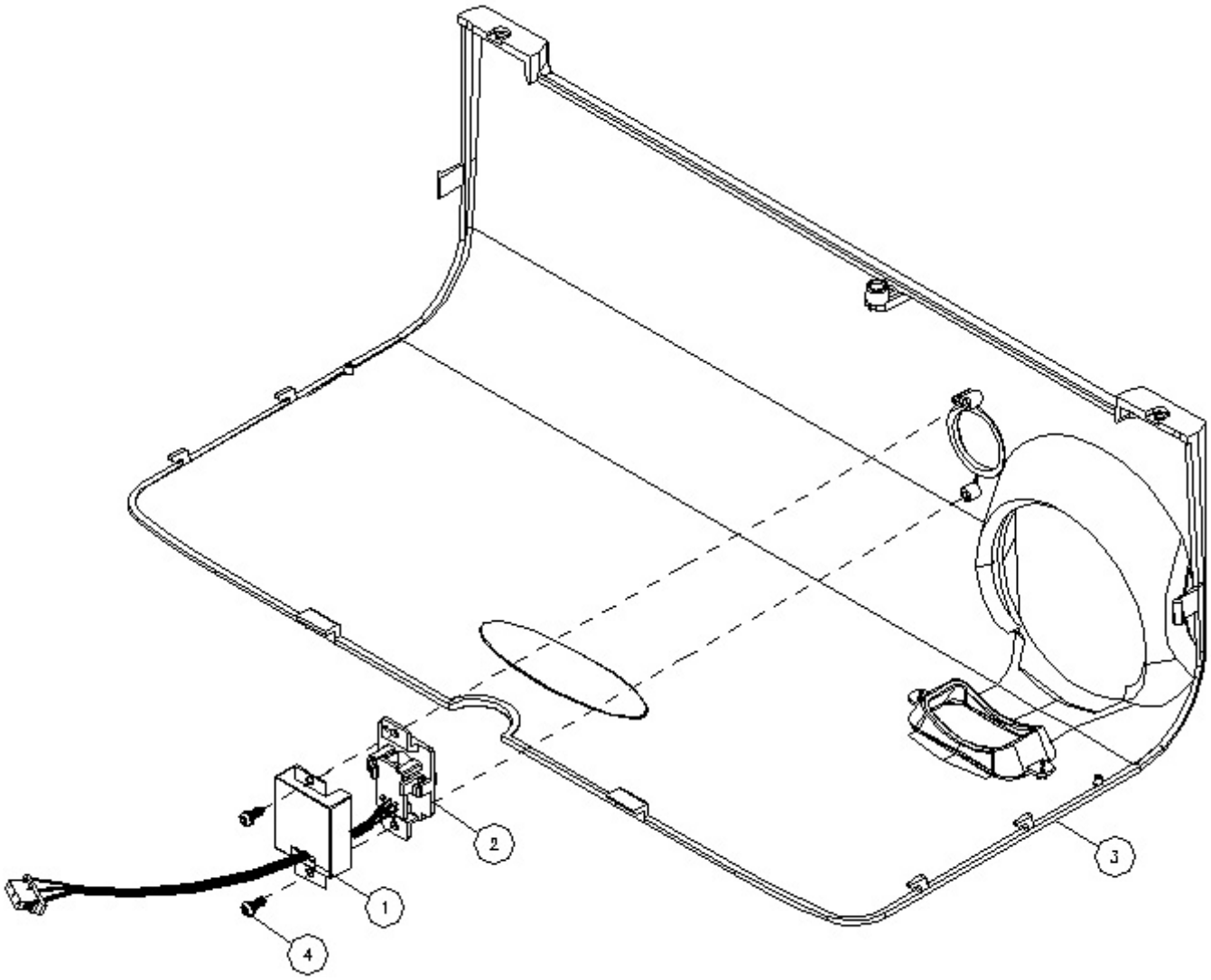
VIII. EP758 Front Cover Module



Exploded Parts List of EP758 Front Cover Module

4	85.WA123.060	SCREW PAN TAP M3*6 (Ni)
3	75.81C02.001	ASSY FRONT COVER MODULE EP758
2	70.89611.001	ASSY IR SENSOR MODULE EP759
1	51.89636.001	FRONT COVER ANTI LIGHT MYLAR EP759
ITEM	PART_NO	PART_NAME

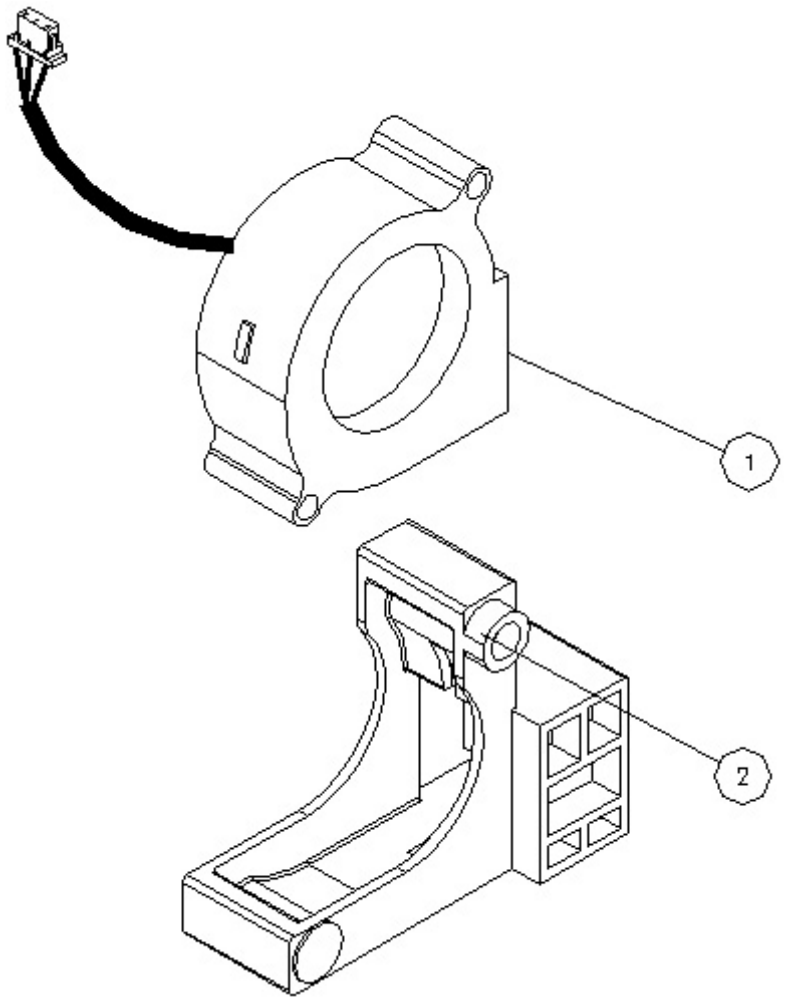
IX. EP759 Front Cover Module



Exploded Parts List of EP759 Front Cover Module

4	85.WA123.060	SCREW PAN TAP M3*6 (Ni)
3	75.89603.001	ASSY FRONT COVER MODULE EP759
2	70.89611.001	ASSY IR SENSOR MODULE EP759
1	51.89636.001	FRONT COVER ANTI LIGHT MYLAR EP759
ITEM	PART_NO	PART_NAME

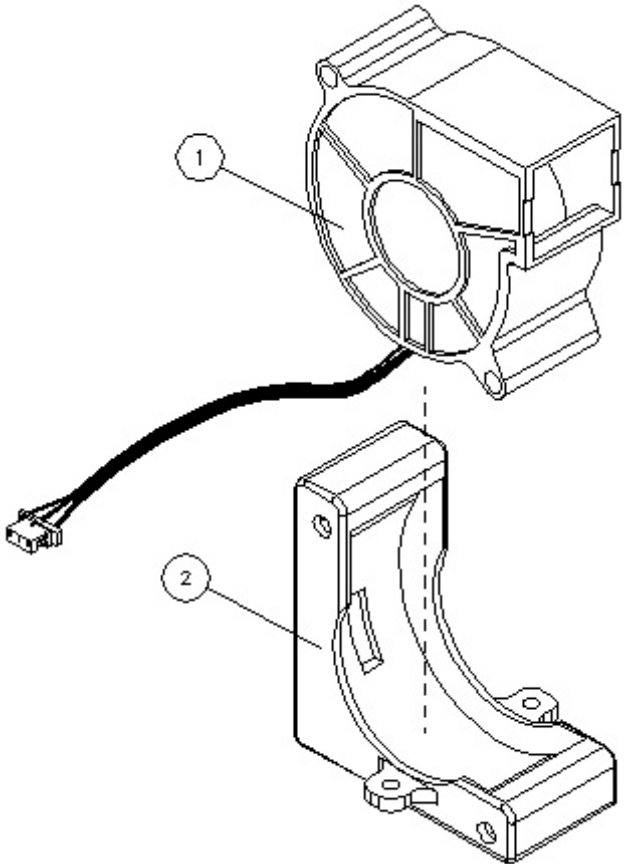
X. EP758 Blower Fan 50x20 Module



Exploded Parts List of EP758 Blower Fan 50x20 Module

ITEM	PART NO	PART NAME
2	52.89603.001	BLOWER FAN 50*20 RUBBER EP759
1	49.80N02G001	SUNON 50x20 R-TYPE BLOWER,BLUE SUMITUDE,"GREEN"

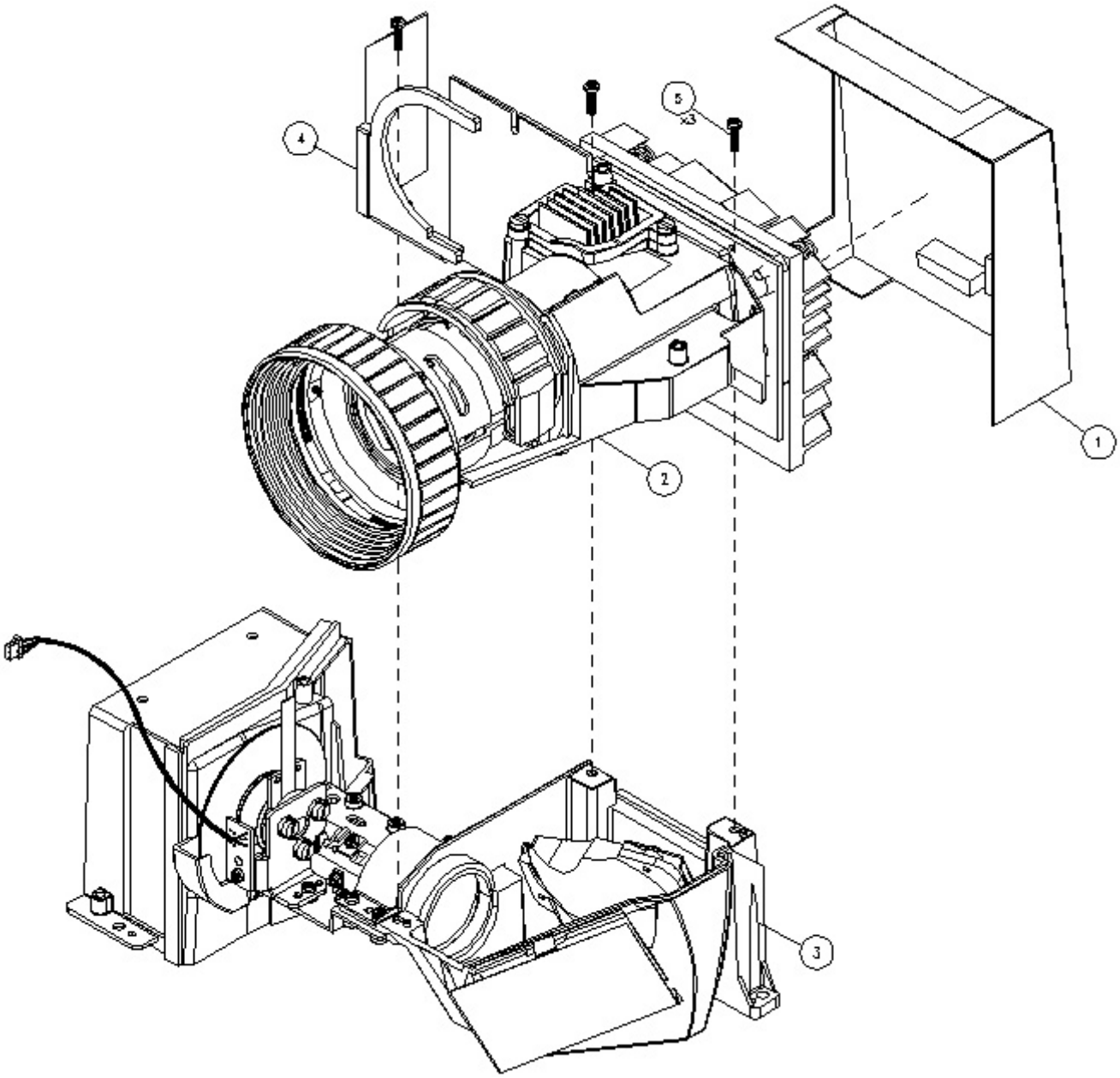
XI. EP759 Blower Fan 50x20 Module



Exploded Parts List of EP759 Blower Fan 50x20 Module

2	52.89503.001	FAN595925 SILICON RUBBER 4100MP
1	49.89604.001	SUNON GB1206PTV2-AY 60*60*25mm BLOWER R-TYPE
ITEM	PART NO	PART NAME

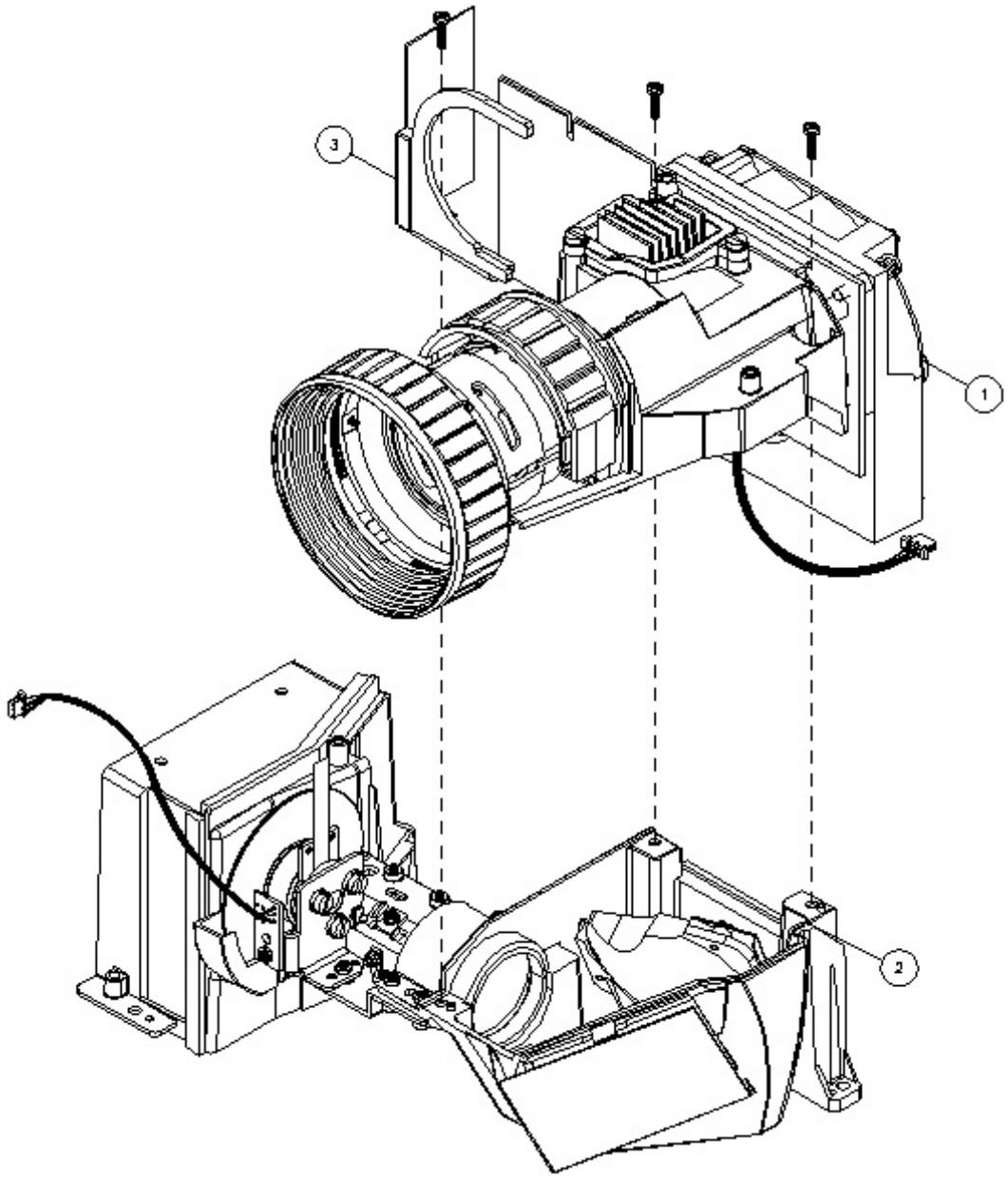
XII. EP758 Engine Module (YO Parts)



Exploded Parts List of EP758 Engine Module

5	85.1A126.080	SCREW PAN MECH M2.6x8 Ni
4	70.89628.001	ASSY CONVERSION SUPPORTER EP759
3	70.89617.001	ASSY ENGINE BASE MODULE EP759
2	70.81C07.001	ASSY OPTICAL ENGINE MODULE EP759
1	51.81C02.001	WIND GUIDER COVER MYLAR
ITEM	PART_NO	PART_NAME

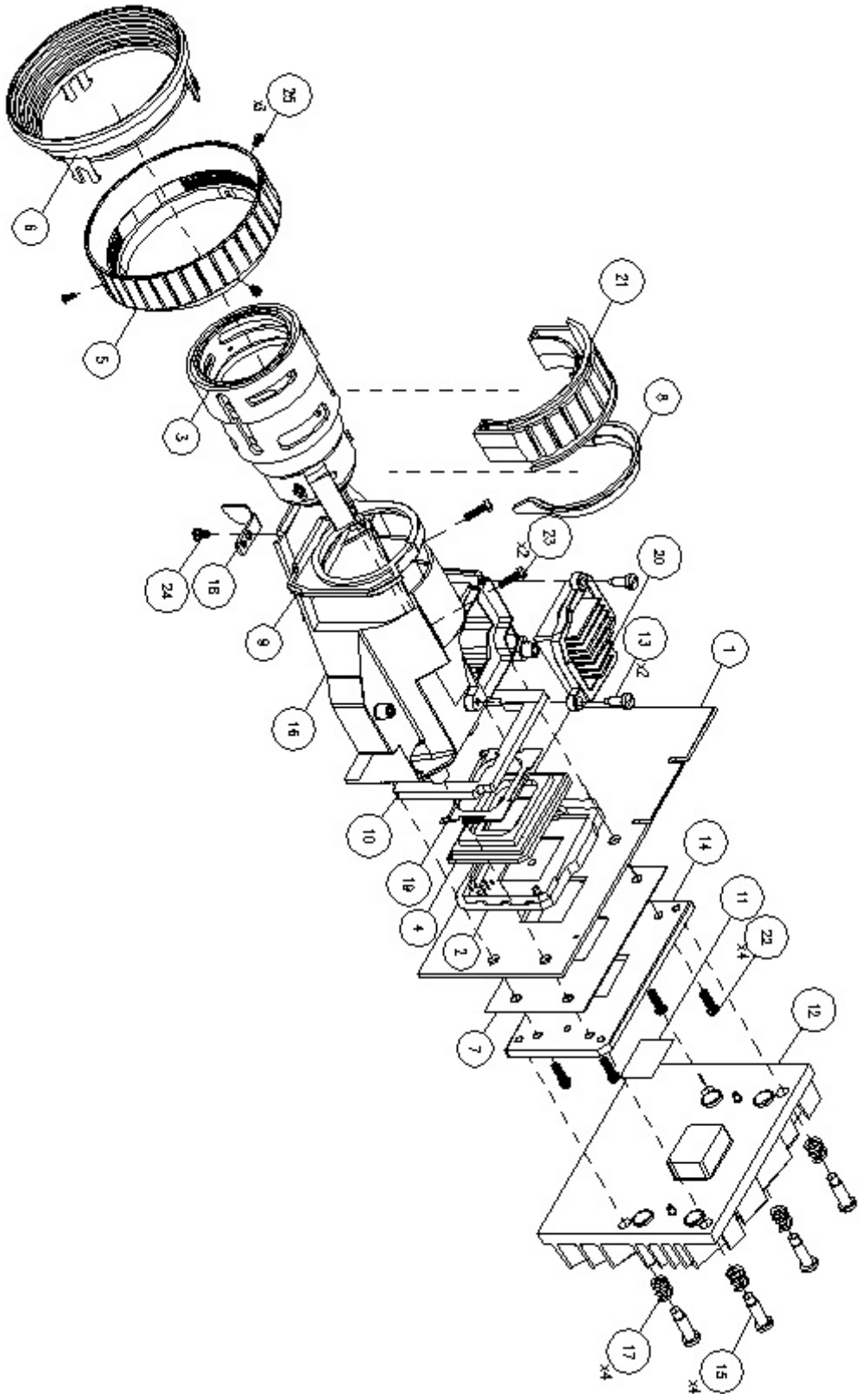
XIII. EP759 Engine Module (YO Parts)



Exploded Parts List of EP759 Engine Module

4	85.1A126.080	SCREW PAN MECH M2.6x8 Ni
3	70.89628.001	ASSY CONVERSION SUPPORTER EP759
2	70.89617.001	ASSY ENGINE BASE MODULE EP759
1	70.89616.001	ASSY OPTICAL ENGINE MODULE EP759
ITEM	PART_NO	PART_NAME

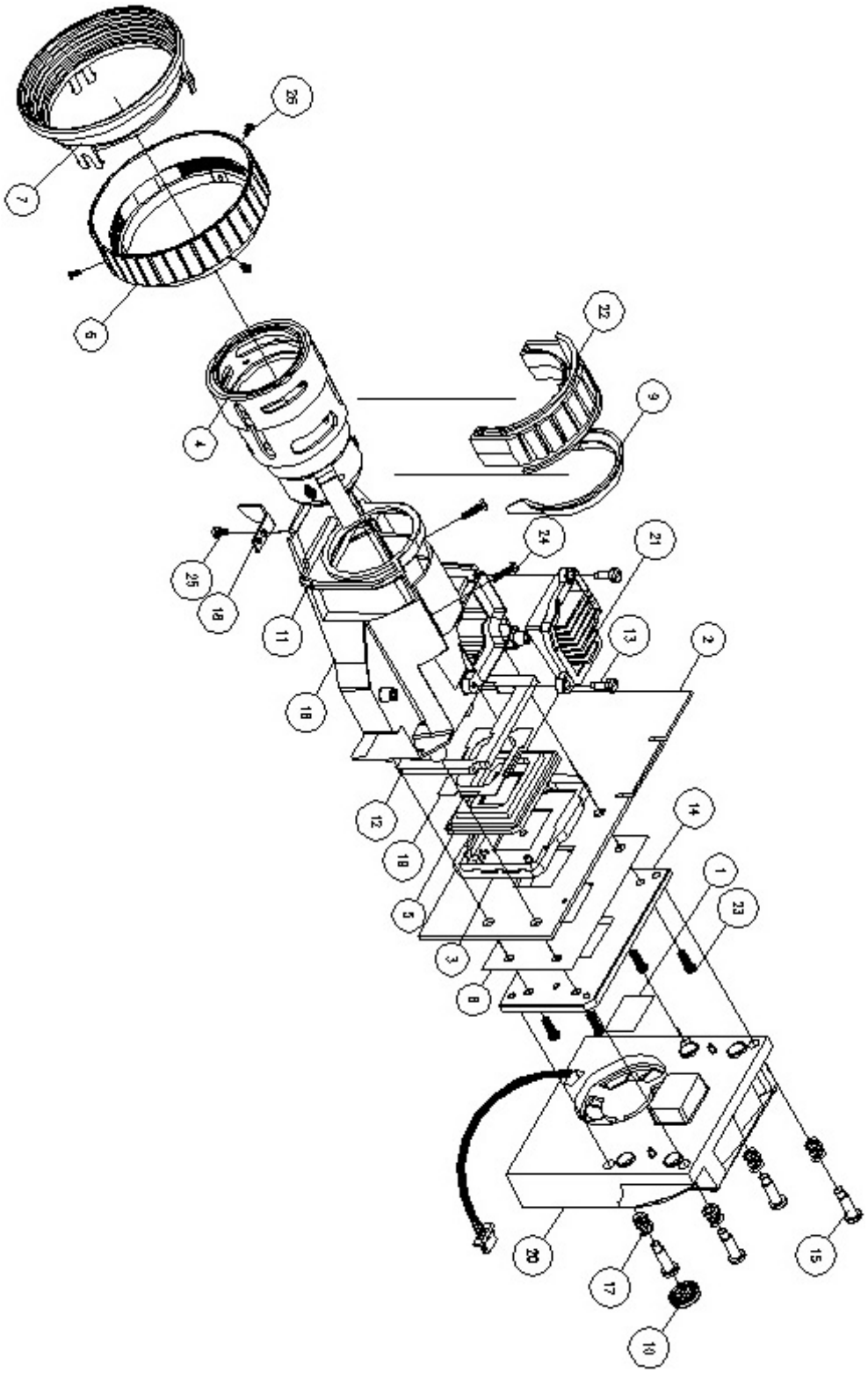
XIV. EP758 Optical Lens Module



Exploded Parts List of EP758 Optical Lens Module

25	85.YA121.035	SCREW FLAT HEAD TAP M1.7*3.5 Ni
24	85.1A626.040	SCREW PAN MECH M2.6x4 BLACK NYLON
23	85.1A126.080	SCREW PAN MECH M2.6x8 Ni
22	85.1A123.080	SCREW PAN MECH M3*8 NI
21	75.89605.001	ASSY ZOOM RING MODULE EP759
20	70.89627.001	ASSY OFFRAY HEATSINK MODULE EP759
19	61.89643.001	DMD MASK SUS301 0.1t BLACK EP759
18	61.89631.001	MASK BRACKET AL 0.8t EP759
17	61.89630.001	HEATSINK SPRING EP759
16	61.89627.001	ENGINE COVER Mg ALLOY AZ91D EP759
15	61.89626.001	HEATSINK SCREW EP759
14	61.89605.001	DMD BACKER PLATE AL 3.0t EP759
13	61.85926.001	COLOR WHEEL SCREW SB21
12	61.81C01.001	EP758 DMD HEATSINK
11	52.89633G001	THERMAL PAD FOR HEAT SINK 17x13x0.3mm EP759
10	52.89627.001	DMD SEAL RUBBER F12 3.2t EP759
9	52.89613.001	ENGINE SEAL RUBBER EP759
8	51.89628.001	ZOOM STOP RING PC+ABS CH6310 EP759
7	51.89627.001	DMD INSULATION MYLAR EP759
6	51.89626.001	REPLACE RING PC+ABS CH6310 EP759
5	51.89608.001	FOCUS RING PC+ABS CH6310 EP759
4	48.858DM.D13	DMD 1024X768 PIXEL DDR FTP 0.7" XGA
3	23.80J01.001	DLP 0.7"XGA ZOOM PROJECTION LENS
2	11.009F0.005	CNNT F 166P FOR 0.55' SVGA LGA DMD SOCKET;FOXCONN
1	80.89603.001	BARE PCB L-6 1.7mm DMD BOARD EP759
ITEM	PART_NO	PART_NAME

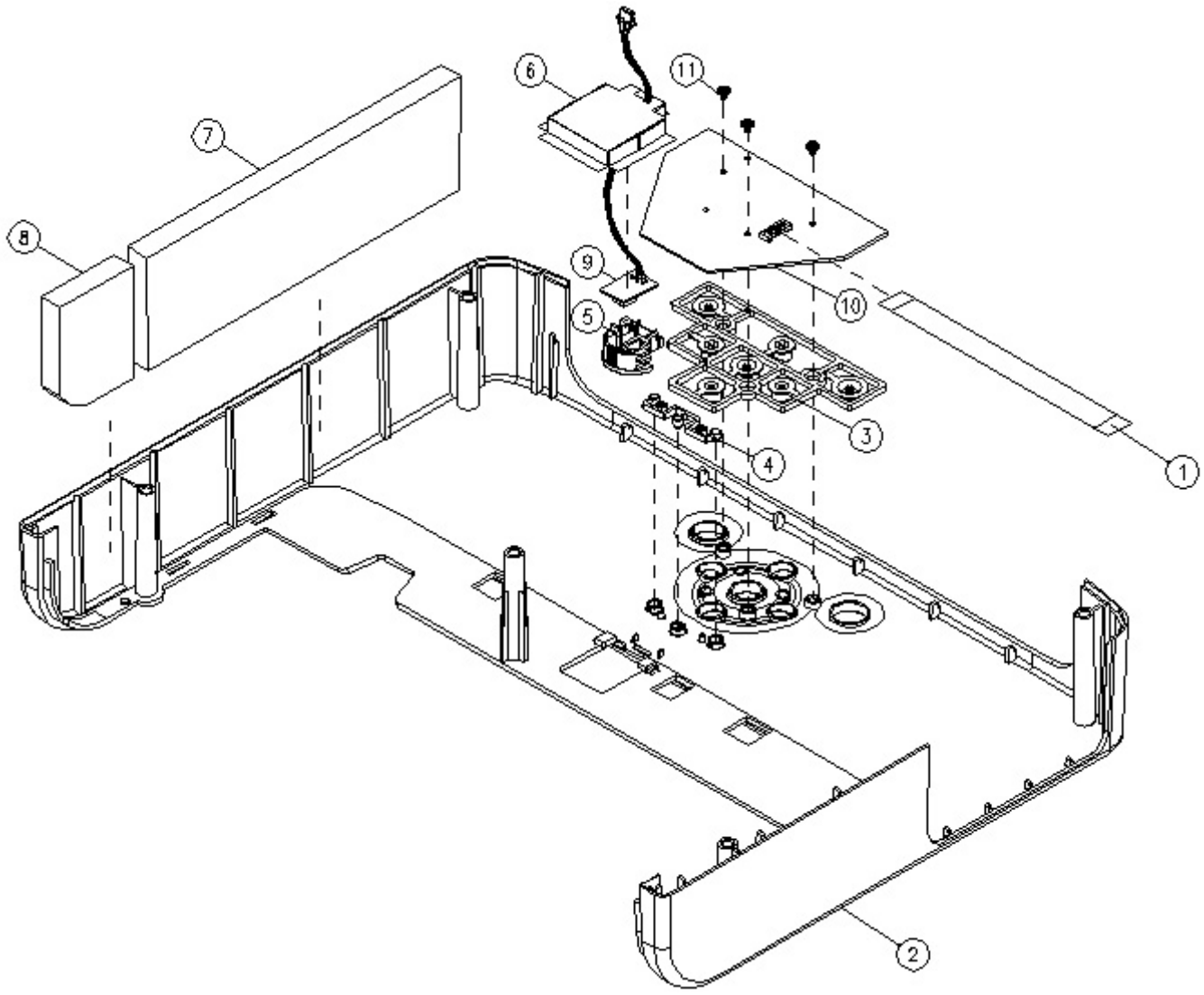
XV. EP759 Optical Lens Module



Exploded Parts List of EP759 Optical Lens Module

26	85.YA121.035	SCREW FLAT HEAD TAP M1.7*3.5 Ni
25	85.1A626.040	SCREW PAN MECH M2.6x4 BLACK NYLON
24	85.1A126.080	SCREW PAN MECH M2.6x8 Ni
23	85.1A123.080	SCREW PAN MECH M3*8 NI
22	75.89605.001	ASSY ZOOM RING MODULE EP759
21	70.89627.001	ASSY OFFRAY HEATSINK MODULE EP759
20	70.89626.001	ASSY DMD HEATSINK MODULE EP759
19	61.89638.001	DMD MASK SUS301 0.15t BLACK EP759
18	61.89631.001	MASK BRACKET AL 0.8t EP759
17	61.89630.001	HEATSINK SPRING EP759
16	61.89627.001	ENGINE COVER Mg ALLOY AZ91D EP759
15	61.89626.001	HEATSINK SCREW EP759
14	61.89605.001	DMD BACKER PLATE AL 3.0t EP759
13	61.85926.001	COLOR WHEEL SCREW SB21
12	52.89627.001	DMD SEAL RUBBER F12 3.2t EP759
11	52.89613.001	ENGINE SEAL RUBBER EP759
10	52.87110.001	RUBBER CAP RUBBER
9	51.89628.001	ZOOM STOP RING PC+ABS CH6310 EP759
8	51.89627.001	DMD INSULATION MYLAR EP759
7	51.89626.001	REPLACE RING PC+ABS CH6310 EP759
6	51.89608.001	FOCUS RING PC+ABS CH6310 EP759
5	48.858DM.D13	DMD 1024X768 PIXEL DDR FTP 0.7" XGA
4	23.80J01.001	DLP 0.7"XGA ZOOM PROJECTION LENS
3	11.009F0.005	CNNT F 166P FOR 0.55' SVGA LGA DMD SOCKET;FOXCONN
2	80.89603.001	BARE PCB L:6 1.7mm DMD BOARD EP759
1	52.89633-001	THERMAL PAD FOR HEAT SINK 17x13x0.3mm EP759
ITEM	PART_NO	PART_NAME

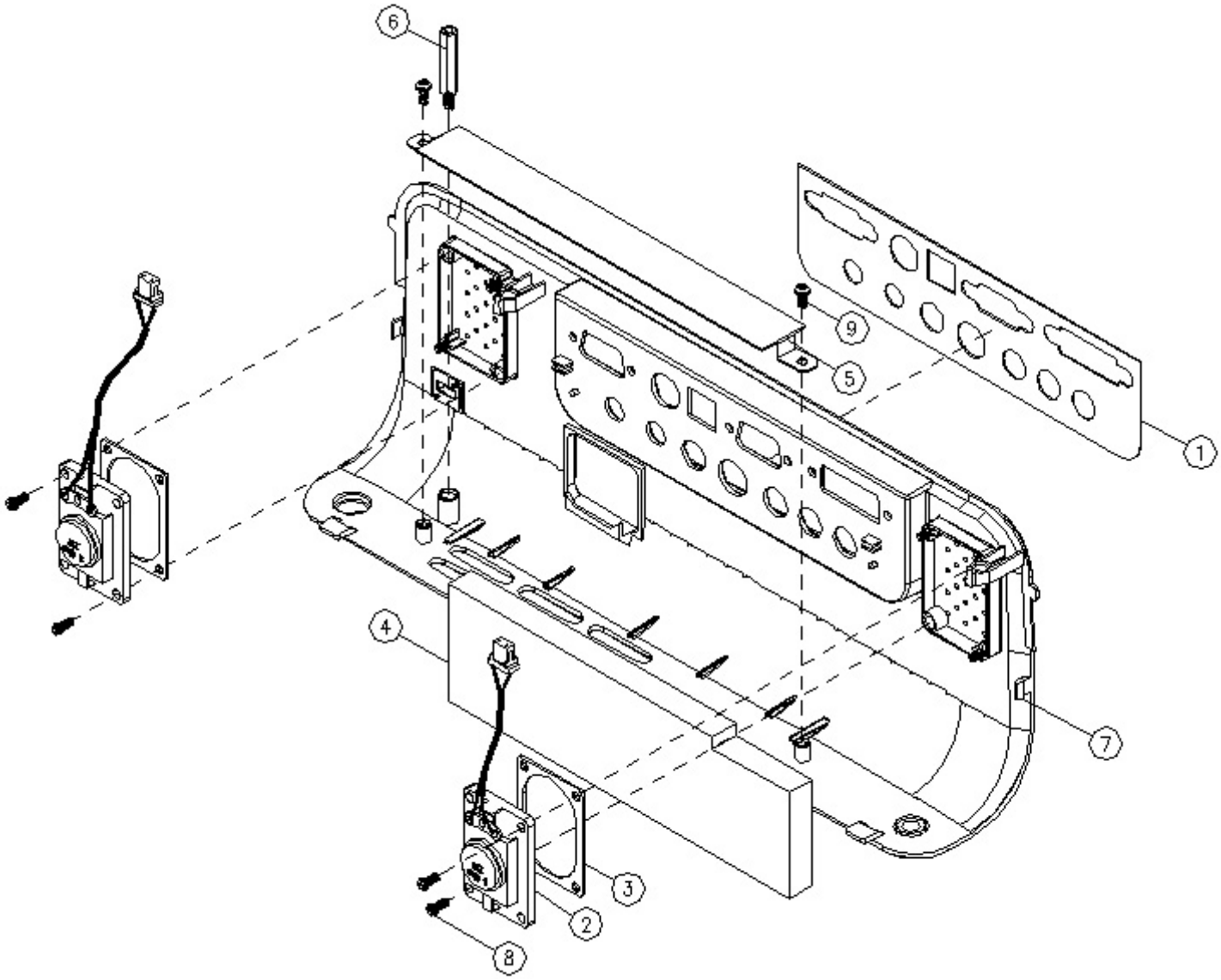
XVI. EP758 / EP759 Top Cover Module



Exploded Parts List of EP758 / EP759 Top Cover Module

11	85.1D122.030	SCREW PAN MECH M2*3 Ni (W/WASHER D5.0)
10	80.89606.001	PCBA KEYPAD BOARD EP759
9	76.88802.001	ASSY IR RECEIVER MODULE(BACK) IVY20S
8	52.89620.001	TOP COVER SMALL SPONGE FOR NOISE EP759
7	52.89619.001	TOP COVER SPONGE FOR NOISE EP759
6	51.89635.001	TOP COVER ANTI LIGHT MYLAR EP759
5	51.89619.001	IR LENS TOP PC EP759
4	51.89606.001	LED LENS PC EP759
3	51.89605.001	KEYPAD PC+ABS CH6310 EP759
2	51.89601.001	TOP COVER PC+ABS CH6310 EP759
1	42.89604.001	CABLE FFC 16P P=0.5 130mm IVY10X
ITEM	PART_NO	PART_NAME

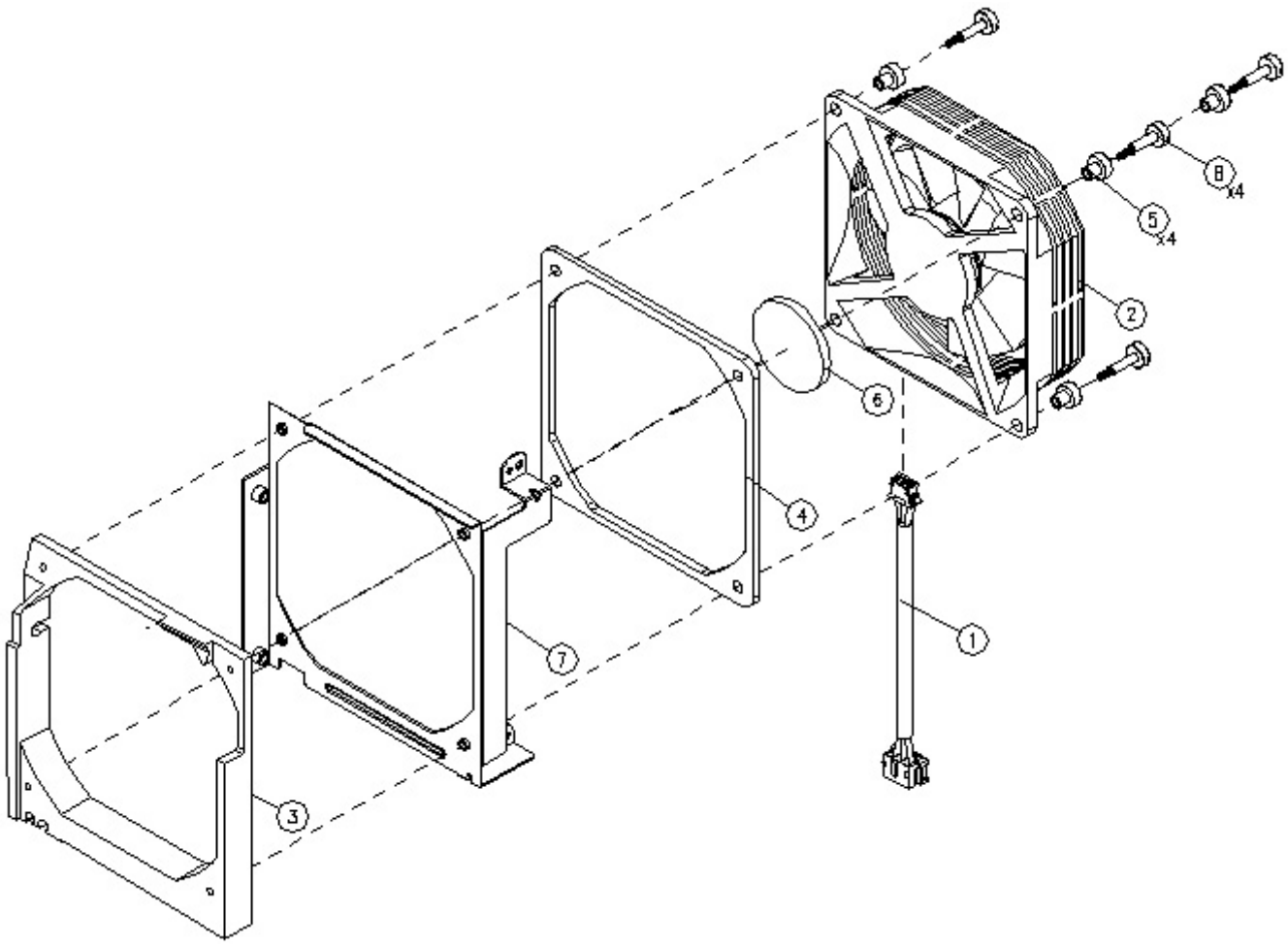
XVII. EP758 / EP759 Back Cover Module



Exploded Parts List of EP758 / EP759 Back Cover Module

9	85.WA123.060	SCREW PAN TAP M3*6 (Ni)
8	85.1A123.060	SCREW PAN MECH M3*6 NI
7	75.89606.001	ASSY BACK COVER EP759
6	61.89634.001	HEX SPACER M3 H=23mm L=6mm BRASS EP759
5	61.89629.001	MESH FOR BACK COVER EP759
4	52.89617.001	ID COVER SPONGE FOR NOISE EP759
3	52.89608.001	SPEAKER PORON EP759
2	49.88604.002	SPEAKER 8ohm 2W ø16 EP759
1	35.89601.001	CONNECTOR MYLAR LABEL FOR EP759
ITEM	PART_NO	PART_NAME

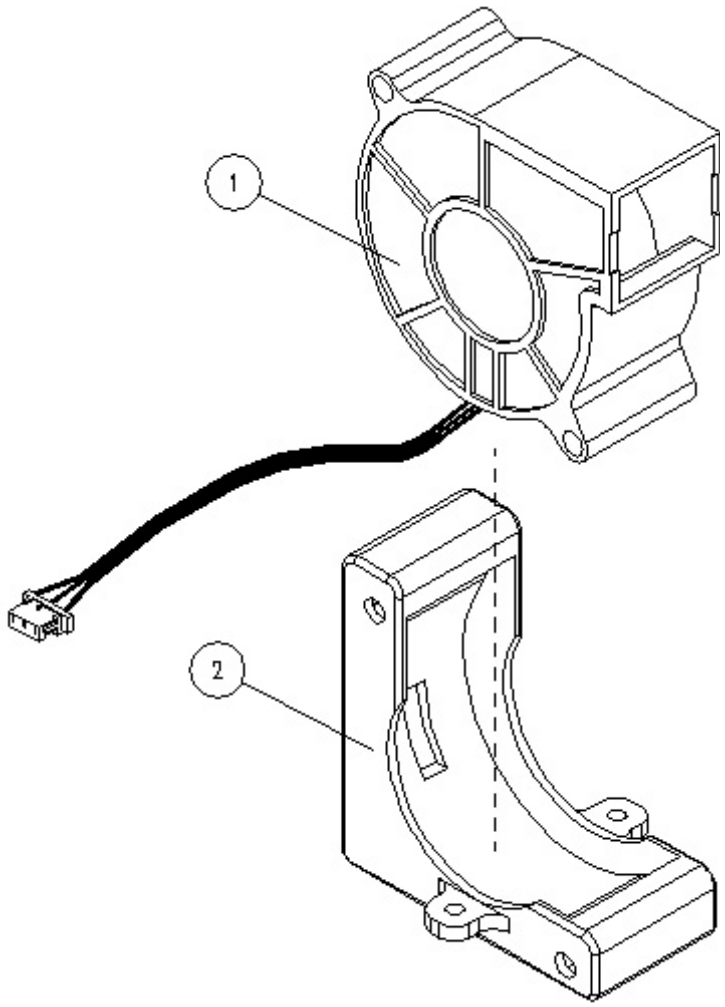
XVIII. EP758 / EP759 Axial Fan 92x25 Module



Exploded Parts List of EP758 / EP759 Axial Fan 92x25 Module

8	61.L1322.001	SCREW FOR 9225 FAN H76
7	61.89607.001	FAN 9225 HOLDER BRACKET AL 0.8t EP759
6	61.86633.001	PANAFLO 92x25 AL FOIL H76
5	52.L1309.001	FAN 9225 RUBBER TOP H76
4	52.L1308.002	FAN 9225 RUBBER BOTTOM H76
3	52.89602.001	FAN 92*25 STEAMTIGHT RUBBER EP759
2	49.86601.002	PANAFLO 92*25 AXIAL FAN;FBL09A12MS
1	42.89606.001	W.A. PANAFLO 92x25 3P JST-ZHR & 3P AMP-173977-3 130mm EP759
ITEM	PART_NO	PART_NAME

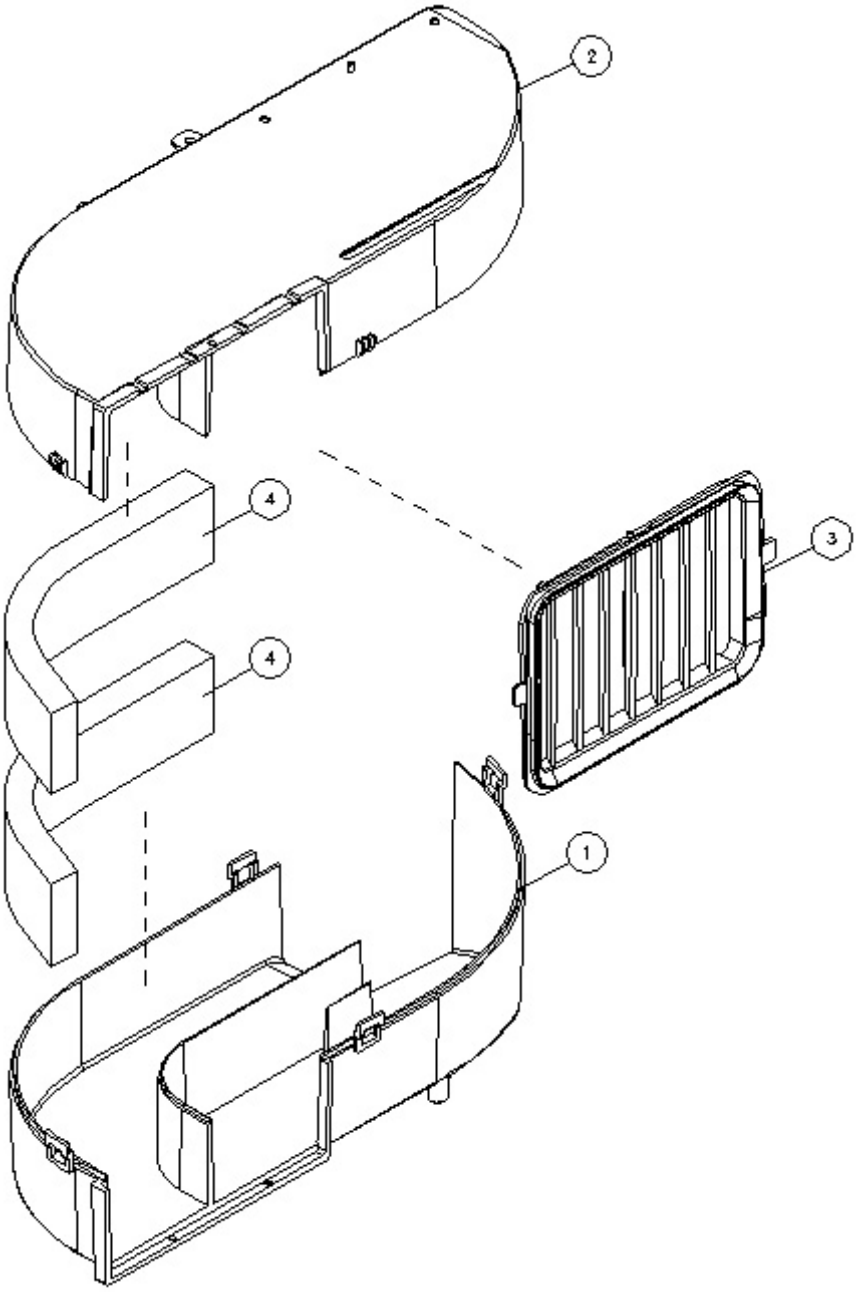
XIX. EP758 / EP759 Blower Fan 60x25 Module



Exploded Parts List of EP758 / EP759 Blower Fan 60x25 Module

2	52.89503.001	FAN595925 SILICON RUBBER 4100MP
1	49.89604.001	SUNON GB1206PTV2-AY 60*60*25mm BLOWER R-TYPE
ITEM	PART NO	PART NAME

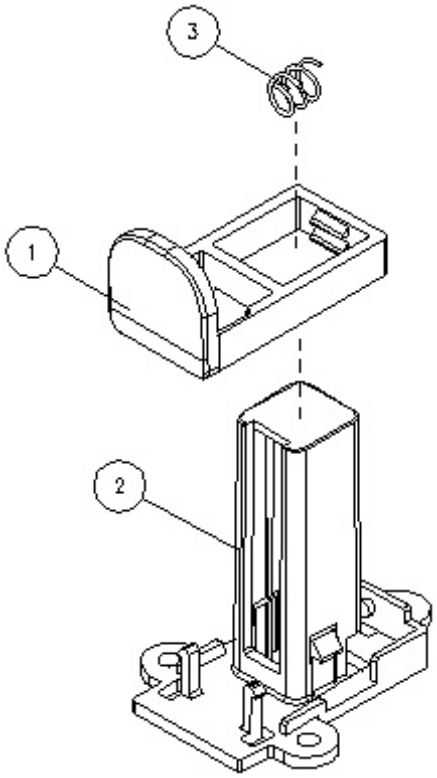
XX. EP758 / EP759 Wind Tunnel Module



Exploded Parts List of EP758 / EP759 Wind Tunnel Module

4	52.89616.001	WIND TUNNEL SPONGE NOISE EP759
3	51.89638.001	VENT-2 PC+ABS CH6310 EP759
2	51.89616.001	WIND TUNNEL TOP PC+ABS CH6310 EP759
1	51.89615.001	WIND TUNNEL BOTTOM PC+ABS CH6310 EP759
ITEM	PART_NO	PART_NAME

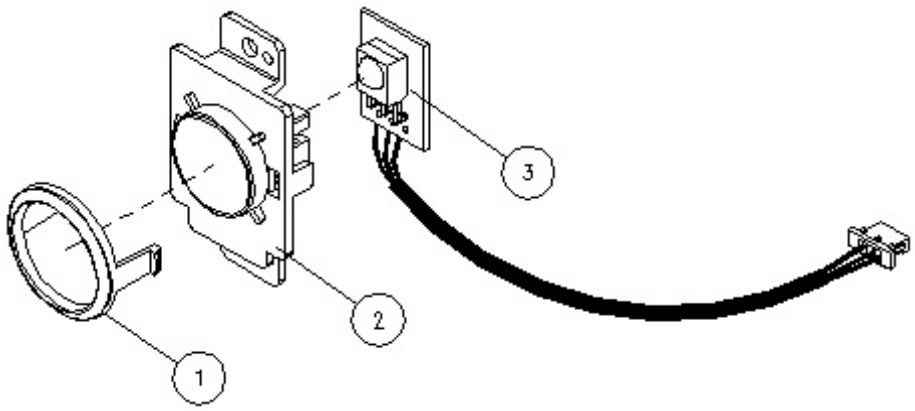
XXI. EP758 / EP759 Elevator Module



Exploded Parts List of EP758 / EP759 Elevator Module

3	61.85913.001	ELEVATOR SPRING SUS304 SB21
2	51.89612.001	ELEVATOR HOLDER NYLON N300 EP759
1	51.89610.001	ELEVATOR PUSH PC+ABS CH6310 EP759
ITEM	PART NO	PART NAME

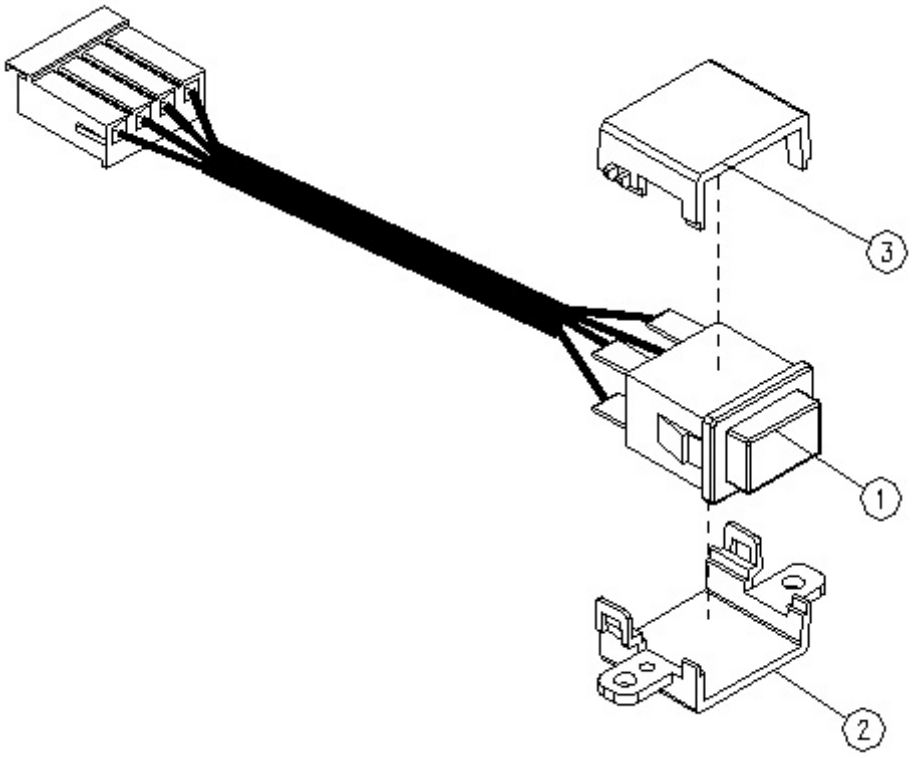
XXII. EP758 / EP759 IR Sensor Module



Exploded Parts List of EP758 / EP759 IR Sensor Module

3	76.89604.001	ASSY IR RECEIVER MODULE(FRONT) EP759
2	51.89618.001	IR SENSOR HOLDER PC 1225Y EP759
1	51.89617.001	IR LENS FRONT RING ABS EP759
ITEM	PART NO	PART NAME

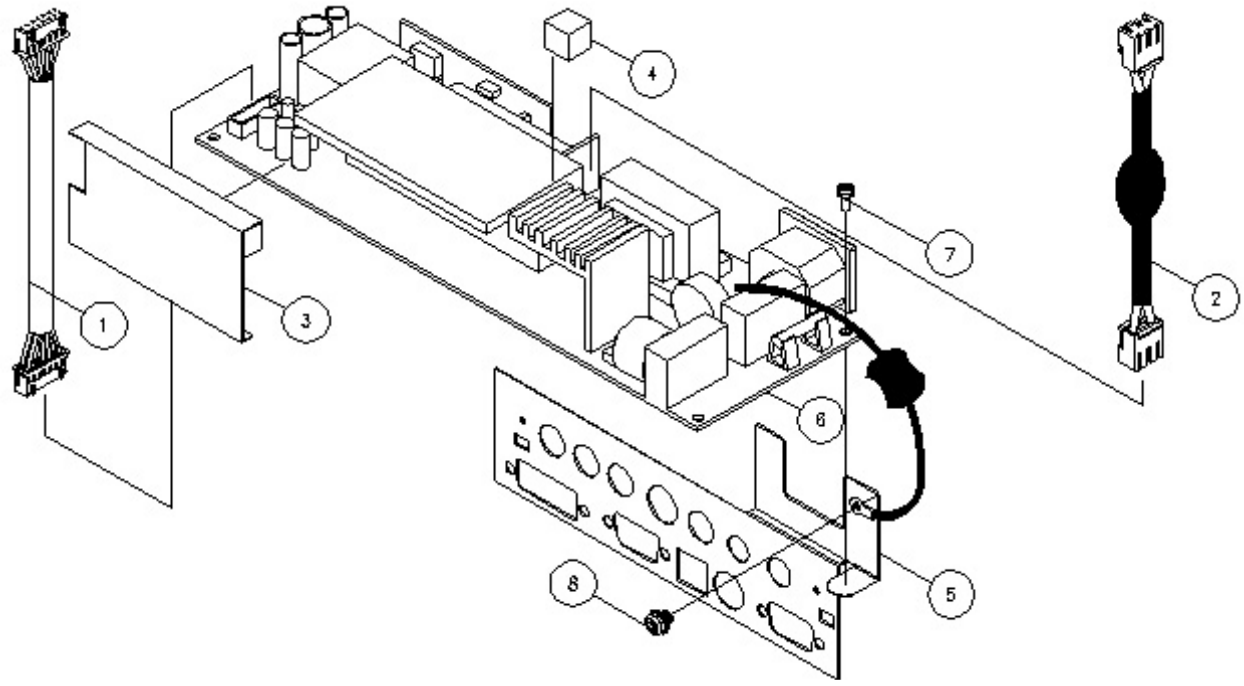
XXIII. EP758 / EP759 Interrupt Switch Module



Exploded Parts List of EP758 / EP759 Interrupt Switch Module

3	51.89624.001	INTERRUPT S/W HOLDER BOTTOM PC+ABS CH6310 EP759
2	51.89623.001	INTERRUP S/W HOLDER TOP PC+ABS CH6310 EP759
1	43.89601.001	INTERRUPT SWITCH H8351AB EP759
ITEM	PART NO	PART NAME

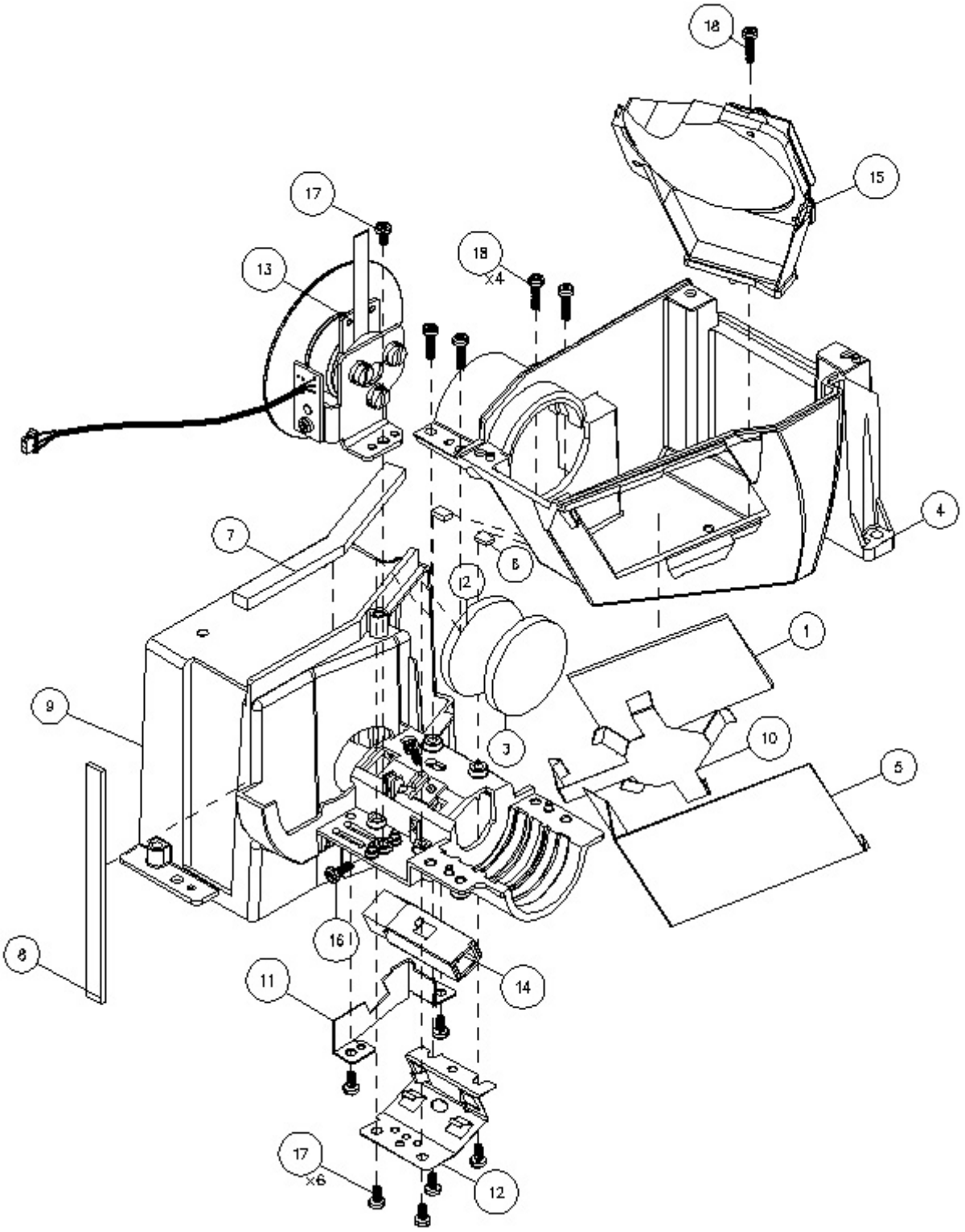
XXIV. EP758 / EP759 LVPS Module



Exploded Parts List of EP758 / EP759 LVPS Module

8	85.1C224.050	SCREW PAN MECH M4*5 W/TOOTH WASHER
7	85.1A123.060	SCREW PAN MECH M3*6 Ni
6	75.89601.001	ASSY QUASAR LVPS EP759
5	61.89622.001	EMI GROUND PLATE Sn 0.6t EP759
4	52.89622.001	LVPS CUSHION SILICON RUBBER EP759
3	51.89632.001	LVPS SPOGE & MYLAR EP759
2	42.89602.001	W.A. 2P #20 180mm LVPS TO LAMP DRIVER EP759
1	42.89601.001	W.A. 16P #26 80mm LVPS TO MAIN BD EP759
ITEM	PART NO	PART NAME

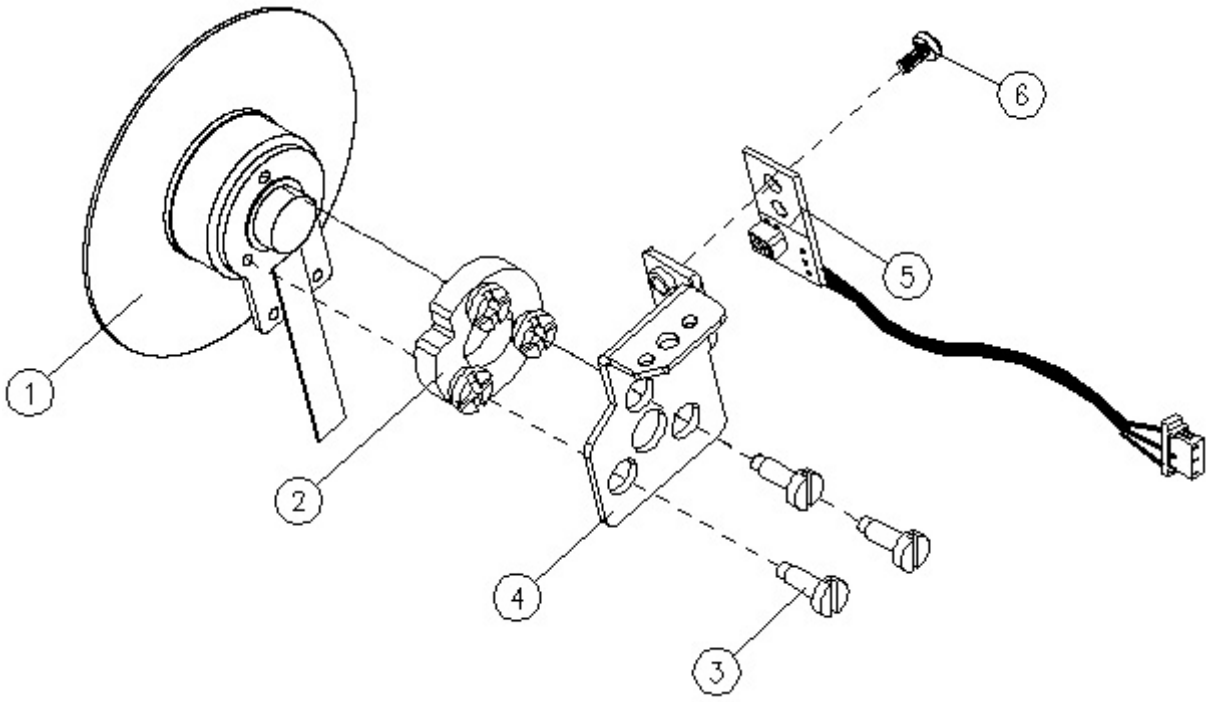
XXV. EP758 / EP759 Engine Base Module



Exploded Parts List of EP758 / EP759 Engine Base Module

18	85.1A126.080	SCREW PAN MECH M2.6x8 Ni
17	85.1A126.040	SCREW PAN MECH M2.6x4 Ni
16	85.1A122.060	SCREW PAN MECH M2x6 Ni
15	70.89620.001	ASSY RELAY LENS MODULE EP759 /EP758
14	70.89619.001	ASSY ROD MODULE EP759 /EP758
13	70.89618.001	ASSY COLOR WHEEL MODULE EP759
12	61.89621.001	ROD SPRING SUS301 0.2t EP759
11	61.89617.001	ROD BRACKET AL 0.6t EP759
10	61.89611.001	MIRROR SPRING PLATE SUS301 0.25t EP759
9	61.89602.001	LAMP HOUSING Mg ALLOY AZ91D EP759
8	52.89626.001	LAMP HOUSING STEAMTIGHT SIDE F12 1.6t EP759
7	52.89625.001	LAMP HOUSING STEAMTIGHT TOP F12 3.2t EP759
6	52.85808.001	PORON-LENS BLACK XB31
5	51.89637.001	ENGINE MORROR ANTI LIGHT MYLAR EP759
4	51.89614.001	ENGINE BASE BMC EP759
3	23.89620.002	CONDENSER 2 ø26mm BK7 SPHERE;Y.O.
2	23.89620.001	CONDENSER 1 ø26mm BK7 SPHERE;Y.O.
1	23.89602.001	POLYGON MIRROR(t1.1mm);PRODISC
ITEM	PART_NO	PART_NAME

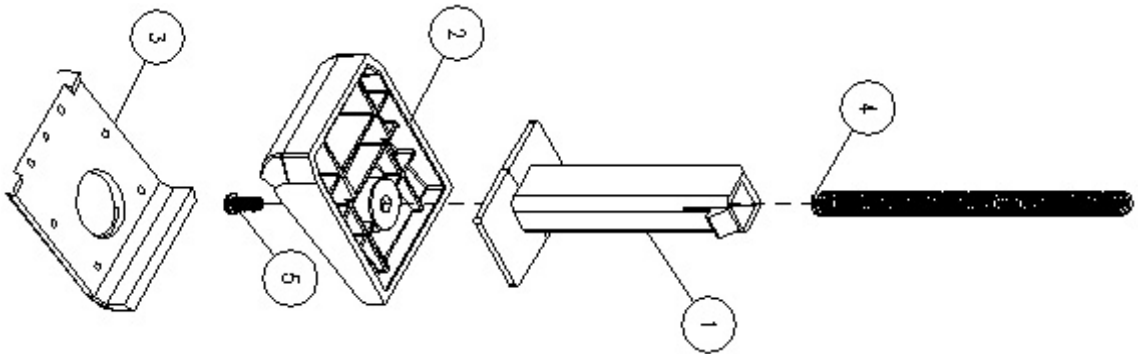
XXVI. EP758 / EP759 Color Wheel Module



Exploded Parts List of EP758 / EP759 Color Wheel Module

6	85.1A126.040	SCREW PAN MECH M2.6x4 Ni
5	76.89602.001	ASSY PHOTO SENSOR MODULE
4	61.89608.001	COLOR WHEEL BRACKET SECC 1.2t EP759
3	61.85911.001	COLOR WHEEL SCREW 4100MP
2	52.89606.001	COLOR WHEEL RUBBER EP759
1	23.89619.020	COLOR WHEEL 48mm R90/G100/W85/B85 SLEEVE
ITEM	PART NO	PART NAME

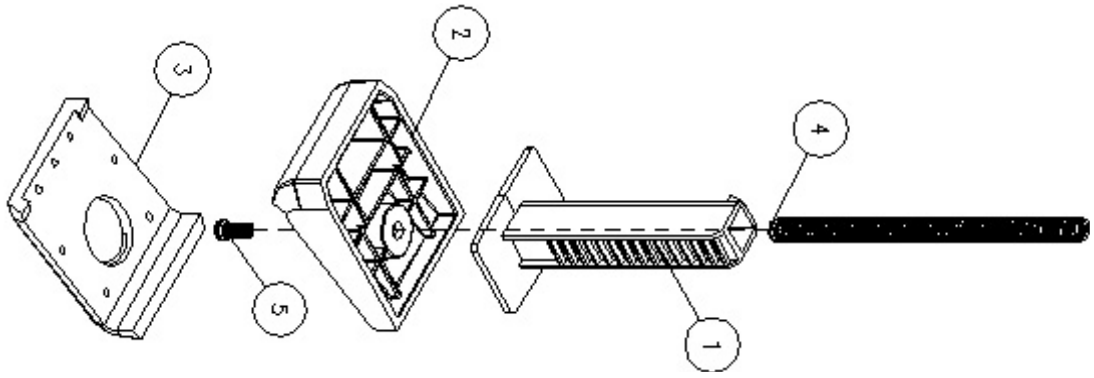
XXVII. EP758 / EP759 Elevator Foot Right Module



Exploded Parts List of EP758 / EP759 Elevator Foot Right Module

5	85.1A123.080	SCREW PAN MECH M3*8 Ni
4	61.87220.001	ELEVATOR O.D4.5 W.D 0.3 L:65mm 3200MP
3	52.89604.001	FRONT FOOT RUBBER EP759
2	51.89613.001	ELEVATOR FOOT PC+ABS CH6310 EP759
1	51.89611.001	ELEVATOR BODY NYLON+GF EP759
ITEM	PART NO	PART NAME

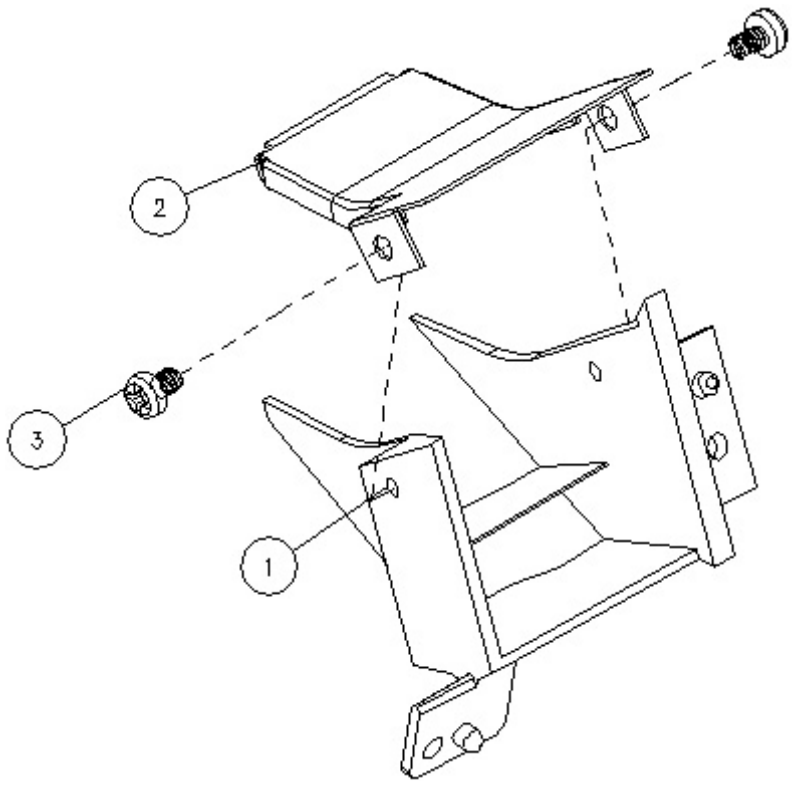
XXVIII. EP758 / EP759 Elevator Foot Left Module



Exploded Parts List of EP758 / EP759 Elevator Foot Left Module

5	85.1A123.080	SCREW PAN MECH M3*6 Ni NYLOK
4	61.87220.001	ELEVATOR O.D4.5 W.D 0.3 L:65mm 3200MP
3	52.89604.001	FRONT FOOT RUBBER EP759
2	51.89613.001	ELEVATOR FOOT PC+ABS CH6310 EP759
1	51.89611.001	ELEVATOR BODY NYLON+GF EP759
ITEM	PART NO	PART NAME

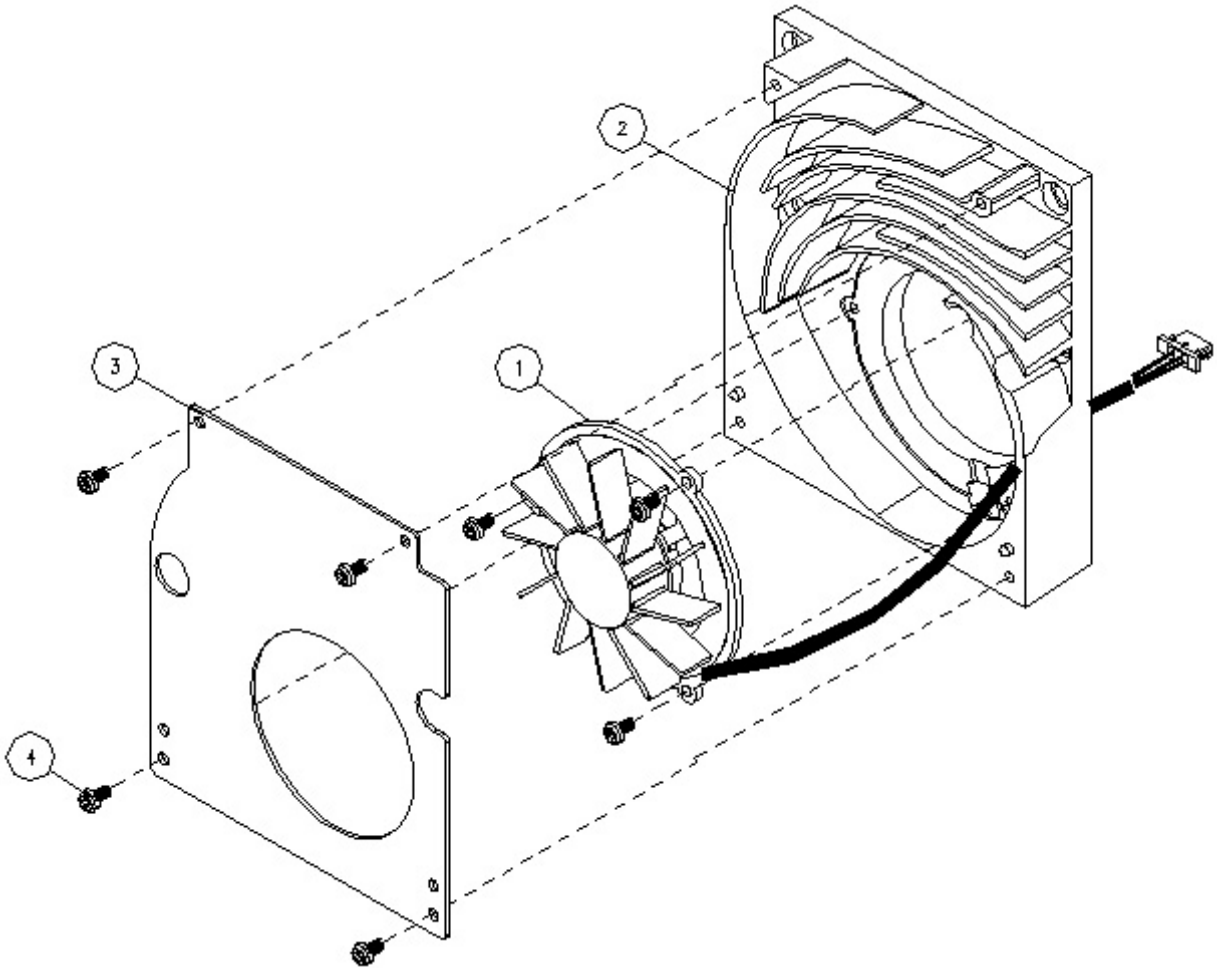
XXIX. EP758 / EP759 Lamp Duct Module



Exploded Parts List of EP758 / EP759 Lamp Duct Module

3	85.1A322.030	SCREW PAN MECH M2*3 BLACK
2	61.89624.001	59*25 BLOWER FAN DUCT COVER SUS301 0.2t EP759
1	61.89623.001	59*25 BLOWER FAN DUCT AL EP759
ITEM	PART NO	PART NAME

XXX. EP758 / EP759 DMD Heatsink Module



Exploded Parts List of EP758 / EP759 DMD Heatsink Module

4	85.1A122.040	SCREW PAN MECH M2x4 Ni
3	61.89609.001	DMD HEATSINK COVER AL 0.8t EP759
2	61.89604.001	DMD HEATSINK AL EP759
1	49.89602.001	SUNON 124509VH-8A 45x45X9mm DISH FAN R TYPE
ITEM	PART NO	PART NAME

Appendix B

Serial Number System Definition

Serial Number Format for Projector

A	BBB	Y	WW	C	D	BEMO	EEEE
①	②	③	④	⑤	⑥	⑦	⑧

① : O = Optoma

② : Product code (ex: 81C = EP758, 896=EP759)

③ : Y = Last number of the year (ex: 2004 - 4)

④ : Week of year

⑤ : Panel vendor code

⑥ : Electrical classification (1=110V, 2=220V, 0=universal)

⑦ : B = BIOS version, E = PCB board version,
M = Mechanical version, O = Optical version

⑧ : Serial code (from 0001~)

EX1 :O81C429T0AAAA1001

This label “O81C429T0AAAA1001” represents the whole serial number for EP758, including Ver. 1st of BIOS and Ver. 1 of PCB Board. Both mechanical and optical version are 1st. In addition, panel vendor is T1. It’s produced on 29-week of 2004 for universal area and its serial code is 1001.

EX2 : O896429T0AAAA1001

This label “O896429T0AAAA1001” represents the whole serial number for EP759, including Ver. 1st of BIOS and Ver. 1 of PCB Board. Both mechanical and optical version are 1st. In addition, panel vendor is T1. It’s produced on 29-week of 2004 for universal area and its serial code is 1001.

Reader's Response

Dear Readers:

Thank you for your backing our service manual up. In order to refine our content of the service manual and satisfy your requirement. We expect you can offer us some precious opinions for reference.

Assessment:

A. What do you think about the content after reading EP758/EP759 Service Manual?

Unit	Excellent	Good	Fair	Bad
1. Introduction				
2. Disassembly Procedure				
3. Troubleshooting				
4. Function Test & Alignment Procedure				
5. Firmware Upgrade Procedure				
6. DDC key-in Procedure				
7. Appendix				

B. Are you satisfied with the EP758/EP759 service manual?

Item	Excellent	Good	Fair	Bad
1. Service Manual Content				
2. Service Manual Layout				
3. The form and listing				

C. Do you have any other opinion or suggestion about this service manual?

_____

_____

Reader's basic data:

Name:		Title:	
Company:			
Add:			
Tel:		Fax:	
E-mail:			

After your finishing this form, please send it back to Coretronic Customer Service Dept. by fax: 886-3-563-5333 or E-mail to service_lpp@coretronic.com Thanks :)